Disclaimer:

The goal of this report is to showcase best practices and business models that contribute to the achievement of the Sustainable Development Goals. It does not encapsulate the entirety of the contributions of the private sector. Also, the reported investments are only based on disclosed information and may vary in timelines. These models, however, are able to give us an idea on where companies are concentrating their efforts on and where we need more infusion of capital.

Most initiatives presented in this report began before the UN launched the SDGs in September 2015. Their inclusion indicates that the private sector was already in the business of sustainable development even before its aspects were formalized into the SDGs.
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The 2030 Agenda for Sustainable Development, with its 17 Sustainable Development Goals (SDGs), is unquestionably ambitious and transformative. It is a global commitment to end extreme poverty, fight inequality and injustice and act against climate change. If achieved, it promises to shift the world onto a sustainable path. Achieving the Global Goals requires the participation of all. It is not just the responsibility of government; the private sector and civil society also have critical roles to play.

The Better Business, Better World report published earlier this year by the Business and Sustainable Development Commission found that additional value of up to $12 trillion per annum globally can be realized in four economic systems: food and agriculture; cities; energy and materials; and health and well-being. This "SDG dividend" should not be viewed only in terms of potential profit but also the opportunity to deeply integrate sustainable development concerns into core business processes. This requires a willingness to determine how commercial practices and business functions can contribute to attaining the SDGs, such as through sourcing, employment, tax practices and corporate strategy. It also requires examining production processes so they become more sustainable. In short there is a need to explore new business models that to a greater degree align business agendas with societal aims. The question is not whether companies should position relative to the SDGs, but how they should do so.

A recent survey by the UN Global Compact shows that the rationale for applying the SDGs in a business context is clearly recognized by the private sector. The survey found that 87% of over 1,000 CEOs interviewed from around the world "believe the SDGs provide an opportunity to rethink approaches to sustainable value creation," with 70% seeing the SDGs as providing "a clear framework to structure sustainability efforts." And we are seeing that these beliefs are increasingly being put into practice. For example, the World Business Commission on Sustainable Development (WBCSD) found that more than 50 of its 163 members worldwide are already reporting publicly on the SDGs.

Recognising the crucial actual and potential contribution of the private sector in achieving the SDGs, UNDP Philippines and the Philippine Business for the Environment cooperated to produce this publication on the voluntary reporting of the private sector’s contribution to the SDGs. Though private sector reporting and efforts to establish processes for applying the SDGs are still being developed in the Philippines, the report highlights a range of interesting initiatives of some companies. These cases can serve as an inspiration to other enterprises.

We hope this will be the first in a series of annual reports. We envision that succeeding publications will encourage more companies to be involved – from large enterprises to medium, small, micro and even start-ups. We also hope that these annual reports will be complemented by annual forums that facilitate exchange of knowledge and experiences and the collective identification of obstacles and innovative solutions to accelerate the achievement of the SDGs. Drawing on the numerous resources for business action on the SDGs, we hope this annual publication and forums can assist companies to maximize their contribution to the SDGs by helping them to: better understand the SDGs; clearly define their priorities; help set goals; support integration of the SDGs into core business practices; and advance robust reporting and communication of achievements.

As UN Secretary-General António Guterres recently noted, the private sector is critical to achieving the SDGs: “without the private sector we will not have the necessary innovation, we will not have the necessary capacity to discover new markets, new products, new services and to be able to develop new areas in the economy… and it is only the private sector that can create enough jobs to stabilize societies”.

We thank all the firms that have contributed to this report and look forward to strengthening our partnership for the SDGs, for secure, sustainable and inclusive development in the Philippines.

Titron Mitra
Country Director, UNDP Philippines
The single most important attribute of the UN Sustainable Development Goals (SDGs) is universality. Climate scientists have bared that all the SDGs are interconnected and it will take nothing less than the concerted action of all countries to avert the further degradation of our social, economic and environmental situation if we are to have a safe, just and sustainable future.

We recognize the essential role of the private sector in achieving the UN SDGs and the significance of collaborating with the government and civil society to attain these at scale. As a Filipino business community, we are proud to report the highlights of our contribution to the achievement of the SDGs. We commend the companies that have participated in this maiden inventory and we urgently encourage other companies to do so.

While this publication does not capture the entirety of the contribution of the private sector, it gives a glimpse of how business integrates the sustainable development goals into their operations and their potential to assist government in order to achieve the country’s SDG targets.

This is our first attempt to account for the SDG contribution of business, and our goals are threefold: first, to learn and understand how to best capture the numerous initiatives of the business sector. Second, to establish the discipline of measuring what we do, because only that which is measured can be improved. Third, to use these representatives of the business sector to serve as a beacon for others to follow. Together with our partners, we will formulate the guidelines to measure the business contributions and provide a platform to report these in the next cycle.

We encourage you to share your thoughts and as you go through the case studies. We hope you will be inspired to make your own mark in achieving the SDGs.

Richard B. Tantoco
President and COO, Energy Development Corporation
President, Philippine Business for the Environment
Executive Summary

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) is a universal call to action to end poverty, protect our planet, and guarantee that no one is left behind in our quest for lasting peace and prosperity. The SDGs build on the accomplishments of the Millennium Development Goals and expand their scope to include climate change, economic inequality, innovation, sustainable consumption, and peace and justice, among other key concerns.

Adopted by 193 UN Member States in September 2015, the SDGs call for urgent global action among all sectors across the globe. They are integral parts of one cohesive vision and are thus connected and interrelated—the pathways toward the success of one embody corresponding courses of action for the success of another.

THE ROLE OF BUSINESS

According to UN Secretary-General António Guterres, “Without the private sector we will not have the necessary innovation, we will not have the necessary capacity to discover new markets, new products, new services and to be able to develop new areas in the economy.” He also added that only the private sector can create enough jobs to stabilize societies.

The large scale of the SDGs’ ambition and the breadth and depth of their collective vision require massive funding. This in turn requires all sectors to be collaborative and innovative in pursuing solutions, with the private sector taking the lead. According to UN report calculations, the returns on investments that can be generated by the full implementation of the SDGs would mean something in the order of magnitude of $30 billion per year. As such, partnerships with the business sector are attractive for both sides, generating investment for the private sector but allowing the private sector “to play an absolutely essential role in making sure that those goals are effectively achieved.” A new platform of partnerships would not only aid the current goals, but address the challenges of the future.

Businesses are now seen as a leading catalyst for social and environmental progress as they have the capital, platform, technology, and resources needed to deliver innovative and sustainable solutions at scale. At the same time, the goals present a great opportunity for businesses to win new markets and reinvent the very concepts of profitability and entrepreneurship through the lens of inclusive progress.

According to the Better Business, Better World Report, companies pursuing strategies aligned with the Global Goals could open economic opportunities across 60 “hot spots” worth up to US$12 trillion and increase employment by up to 380 million jobs globally by 2030. Asia represents 40 percent of the global value and nearly two-thirds of total jobs.

UNDP-PBE ONLINE PORTAL FOR THE SDGs

To hone the discipline of reporting within the context of the SDGs, the United Nations Development Programme (UNDP) and the Philippine Business for Environment (PBE) launched a pilot online portal in September 2016.

This pioneering platform enables companies to report on their unique sustainability strategies and business initiatives with an end goal of narrating past achievements, while sharing best practices and inspiring more innovation and action towards achieving the SDGs.
The portal and the succeeding report aim to institutionalize a mechanism through which the contributions to sustainable development of private companies—regardless of size, portfolio and industry—can be systematically documented and recognized.

**OUR DEBUT REPORT**

This report is the first of its kind in the country. It showcases the preliminary results of the online portal’s survey on how businesses are aligning their core business processes, activities, and initiatives with the SDGs.

The narratives presented here are based on actual contributions and desk research. It highlights 139 initiatives from 75 reporting companies, of which 40% are voluntary submissions through the portal and 60% are sourced from publicly-disclosed information through desk research.

Most of the initiatives presented here began before the SDGs were launched. Their inclusion reminds us that the private sector was already in the business of sustainable development even before its tenets were formally articulated into the 17 Global Goals.

Based on the submitted initiatives with disclosed investments information, a total of Php 40.7 billion have already been invested in SDG-aligned core business practices and programs in the Philippines. Ninety-eight percent of the total disclosed investments are initiatives for SDG 11 (Php 13.7 billion), SDG 4 (Php 11.3 billion), SDG 7 (Php 7.5 billion), and SDG 3 (Php 7 billion).

The most number of reported initiatives are on SDG 12 on Sustainable Consumption and Production with 24 initiatives and Php 88.6 million of disclosed investments. They contribute to solid waste management (which includes e-waste and hazardous waste), water efficiency and conservation, sustainable packaging and production, and green procurement.

This cluster is closely followed by initiatives that contribute to SDG 8 (promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all) with 21 reported initiatives and Php 141 million of disclosed investments. The reported initiatives focus on employment to disadvantaged sectors, skills training for employment, connecting communities and MSMEs to wider markets and opportunities, microfinance for MSMEs, and capacity building and financial-literacy advocacy.

**THE WAY AHEAD**

The challenge for the private sector is to move away from thinking and operating in silos, towards a truly inclusive and sustainable approach to doing business. Beyond philanthropy and corporate social responsibility, we will continue to encourage businesses to actively work for the SDGs in a way that also attracts fresh investment streams, enhances their profitability and ensures inclusive and sustainable development.

Already, the initiatives in this report show that companies can align profit with purpose. We will therefore use the next editions of this report as a solid platform for recognizing the private sector’s potential and capacity in accelerating achievement of the SDGs. In doing so, we hope to better shape market forces that will enable SDG contribution to gain more traction and scale in the next few years.
Introduction & Overview on SDG Initiatives

The Global Goals present new and exciting business opportunities for long-term growth, embracing sustainability and ensuring wider benefits for society. Achieving these would create a future that is equitable and ecologically balanced while being economically prosperous and inclusive.

According to the World Business Council for Sustainable Development (WBCSD), achieving the SDGs would unlock USD 12 trillion a year globally in business value across four economic systems alone. These are energy and materials (USD 4.3 trillion), food and agriculture (USD 2.3 trillion), cities and urban mobility (USD 3.7 trillion), and health and well-being (USD 1.8 trillion).

At no time in the history of commerce has the private sector played such a clear and crucial role in achieving both lasting social, economic, and environmental good at such a large scale. By the end of the SDGs in 2030, we believe that some of our best enterprises will be those who can address our most pressing global challenges today, and through the most inventive and inspiring ways.
Total Number of Reported Initiatives per Sustainable Development Goal, %

- **4 Initiatives** (3% to total)
- **5 Initiatives** (4% to total)
- **8 Initiatives** (6% to total)
- **7 Initiatives** (5% to total)
- **13 Initiatives** (9% to total)
- **24 Initiatives** (17% to total)
- **16 Initiatives** (12% to total)
- **3 Initiatives** (2% to total)
- **21 Initiatives** (15% to total)
- **7 Initiatives** (5% to total)
- **13 Initiatives** (9% to total)
- **4 Initiatives** (3% to total)
- **7 Initiatives** (5% to total)

**139 TOTAL INITIATIVES**

**75 REPORTING COMPANIES**
SDGS on People
It is no coincidence that the Global Goal to eliminate poverty is the very first of the 17 SDGs. People and our communities—the health, well-being, and inclusion in societal processes of every person in the planet—are at the center of the 2030 Agenda.

To successfully reach the rest of the goals on the environment and achieve lasting prosperity and peace, no person should be left behind on our onward push to a sustainable world. This means achieving zero incidences of poverty and hunger, as embodied in SDGs 1 and 2.

The next three goals on people, SDGs 3, 4, and 5, seek to ensure healthy lives, quality education for all, and gender equality and the empowerment of all women and girls.

These first five goals are interdependent and invaluable to our collective aspiration to halt environmental destruction, stop climate change, and realize a truly sustainable planet in the next decades.
ELIMINATING POVERTY
Eliminating poverty is a precondition to sustainable development and is largely dependent on social inclusion. This is precisely why the Sustainable Development Goals, i.e. SDG 8, call for the creation of decent jobs and inclusive economic growth—areas where businesses clearly play pivotal roles.

Moving away from aid as the primary source of development funding, the SDGs now focus on broad-based economic solutions and the creation of equitable opportunities to lift our poorest out of poverty. In this light, every company, no matter the size, has the potential to make significant contributions to our collective goal to eradicate poverty in all its forms.

Unprecedented economic growth at an average of 6.1% from 2010 to 2016 has enabled the Philippines to reach a high employment rate of 95.3% as of December 2016. Net foreign direct investment inflows, moreover, has reached $6.2 billion in early 2016.

In spite of these advances, significant gaps and inequities in income brackets continue to persist, especially between urban and rural communities and among men and women. As of 2015, poverty rates in the country decreased to 21.6% from 25.2% in 2012. However, this means that one in every five Filipinos or 21.9 million Filipinos were poor in 2015.

The prevalence of poverty presents massive opportunities for the entire local business sector. These include developing products and services tailored for the poor and granting them improved access to basic necessities, including them into the supply chain, as well as opening employment opportunities for them. By including the poor into the economy, businesses will enlarge their market base while giving a better chance for more Filipinos being lifted out of poverty.

In addition, businesses also stand to benefit from the need for new product concepts, a larger talent pool, a healthier and more productive workforce, and lower healthcare costs, among other areas of business growth.

This section presents local examples of how companies benefit from their efforts in bringing Filipinos out of poverty.

SDG Targets Being Addressed

1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disaster.

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

5.1 Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources in accordance with national laws.
Using the power of entrepreneurship in innovating constantly and moving strategically, businesses in the Philippines can find a host of exciting opportunities in growing our agricultural sector, which for so long has stayed as one of the country’s poorest performing sectors.

This sector has an annual average GDP contribution of only 10% from 2013 to 2015 and its average annual labor productivity growth has stayed at only 2.9% in the last three years—the lowest growth rate among all sectors.

The vast opportunities in finding sustainable business solutions in this sector become more apparent with these numbers:

- 75% of the country’s poorest work in agriculture
- 30.4% of the entire labor force earn less than half of the current minimum wage (P251 – P454 per day) belong to the farming community.

Given these challenges, a good number of businesses in the Philippines are now responding directly to specific agricultural issues, while simultaneously driving in business income.

Nestlé Philippines, Aboitiz Equity Ventures (AEV), and Century Properties Group (CPG) are banking on the growth of local produce, as well as local sourcing from poor farming communities, to push their business agenda forward in line with the SDGs.

Nestlé has a sustainable coffee farming program, called the NESCAFÉ Plan, which assists farmers to increase their local coffee production and works towards sustainable local supply of Robusta coffee. The Company does this through training, connecting farmers to agronomists, distributing high-quality coffee plantlets and providing a ready market for local farmers. In the last 3 years, 33,676 farmers have been trained and a total of 6,848,708 plantlets have been distributed through government partners. In the last 3 years the company has steadily increased its local purchase of robusta coffee. In 2016, the company bought 165%
more local robusta coffee compared to its purchase in 2015.

CPG’s new business, Palawan Supercorn Development Corp., has implemented innovations to reduce imports and meet the increasing demand for yellow corn feedstock by growing the crop locally. AEV’s agribusiness subsidiary, Pilmico Foods Corporation, has a program called Mahalin Pagkaing Atin (literally, “love your own food”) which supports local backyard raisers (swine & poultry) by providing them with tools to ensure sustainable livelihoods while also promoting a “pride of place, pride of product” mindset for both consumers and raisers.

All the cited strategies are able to strengthen their companies’ respective supply chains, while promoting sustainable farming practices, augmenting the income of small-scale farmers, and encouraging partners and customers to support local produce.

Energy firms Pilipinas Shell Petroleum Corporation (PSPC) through its social arm Pilipinas Shell Foundation, Inc. (PSFI) and Energy Development Corporation (EDC), are focusing on livelihood training and capacity-building support for farmers as a way to improve the living conditions of poor communities living near their project sites.

Aside from enlarging the sustainable energy business in the Philippines, EDC has been actively inculcating the value of sustainable livelihood by introducing its framework anchored on the transformation of a livelihood project to a business enterprise and creating self-sustaining communities. To date, six of its eight cooperatives are now operating under a Zero-Livelihood Budget where they no longer receive financial assistance from EDC but the company continues to provide technical assistance and social interventions.

Similarly, PSFI is reaching out to marginalized farmers (SHELL Saka) and indigenous peoples (SHELL ISIP) to spur economic growth through farming and other related livelihood programs.
AGRICULTURAL INNOVATIONS AND SCALE OF INVESTMENTS

Through fund-sourcing and multi-sectoral partnerships with the government and educational institutions, some of these programs, such as EDC’s Livelihood Program, have been able to sustain their initiatives and reach more communities year after year. Today, EDC has provided livelihood to 104 farmer associations from 47 partner villages across its project sites.

The use of cutting-edge technologies, including global positioning systems in agricultural production for growing corn at CPG’s Palawan Supercorn, can enrich the know-how of the country’s farming groups and inspire the use of more technological innovations as business competition heightens.

The increasing scale of investments of these programs, meanwhile, point to the growing awareness among businesses of the potential of agricultural concepts to generate sizeable shareholder returns.

AEV’s “Mahalin Pagkaing Atin” program has invested over ₱14.8 million on piglet dispersal, egg machines and bakery kits to empower more local raisers & baking enthusiasts since the program started in 2014.

Century Properties has invested ₱202 million in growing its Palawan Supercorn businesses with a target of producing 900,000 metric tonnes of corn feedstock per year at a competitive price of ₱11.7 per kilo.

EDC’s Livelihood Program, the longest-running initiative in this group, has disbursed over ₱270 million over a 12-year period starting 2005. Having livelihoods, forest communities avoided encroaching the forests. This program was key to the success of the protection of watersheds and the increase in forest cover by more than 50% for the past 3 decades, ensuring the sustainability of its steam supply for its geothermal power plants.

411 beneficiary families of AEV’s MPA Program

11,747 members of farmer associations benefitted from EDC’s Livelihood Program
FOOD SECURITY AND CHILDREN

Despite the government’s advances in food security and nutrition, millions of Filipino children continue to suffer from stunting. According to the 2015 Regional Overview of Food Insecurity in Asia and the Pacific, approximately 17.5 million Filipinos are still undernourished and 33.5% of our children below five years old are stunted (low height-for-age ratio). This is in stark contrast with the fact that we are losing P8.4 billion worth of rice per year, equivalent to each Filipino wasting about 3.3 kg per year. This amount of rice can feed 4.3 million people.

In aid of the government’s continued efforts to achieve better nutrition among children, multinational giants Nestlé and PSPC are pursuing new business tracks that address undernutrition in the communities where they operate.

Nestlé’s Micronutrient Fortification program, for instance, is now a core business strategy and a profit driver of the company’s operations in the Philippines. The program fortifies strategically positioned products with vitamin A, zinc, iron and iodine. These products, such as the popular BEAR BRAND milk, are available in small pack sizes to make them more accessible to low-income groups.

Complementing this fortification drive is Nestlé Healthy Kids, in partnership with the Department of Science and Technology – Food and Nutrition Research Institute (DOST-FNRI). This program is an unbranded program that promotes healthy eating habits, through fun interactive sessions, by including nutrition into the curriculum of targeted schools in vulnerable communities and highlighting the importance of reading food labels to school children. The program measures increase in knowledge, attitude and behavior.

Another program for the youth, in partnership with the government’s Department of
Education, is PSFI Green Schools Program. This community development initiative targets PSPC’s fenceline communities—these are neighborhoods adjacent to PSPC’s plants’ areas of operation. In keeping with its principle of good corporate citizenship and discovering that most of its fenceline communities face problems related to malnutrition, PSPC, through PSFI’s Green Schools Program integrates urban gardening, nutrition, and waste management into the subjects of select grade schools.

The results of these programs have been encouraging. Nestle’s Micronutrient Fortification program—a good example of how to address a crucial health challenge through a core business strategy—has been able to contribute to decreasing the prevalence of micronutrient deficiencies in vulnerable groups. The company achieved this while increasing its market share and selling around 22 billion servings of fortified products in 2016.

Nestle’s Healthy Kids has so far reached 5,289 grade-four students in sixteen schools from 2013 to 2016 with continued plans for expansion. The program also showed significant increase in knowledge, attitude and behavior scores.

PSFI’s Green Schools has reached three schools, trained nine teachers, and addressed the needs of 90 pupils suffering from severe wasting or low weight-for-height ratio. Both programs are also good public-relations tools that strengthen their respective brands. Sustaining these programs at scale and forging more partnerships are the next challenges these programs will face towards greater shared values for more people.

### BRIDGING THE GENDER GAP THROUGH GAINFUL LIVELIHOOD

Unilever Philippines

| 51,000  | 17,387 |
| sari-sari store owners trained through Unilever’s Kabisig Summits | Individuals trained on basic management skills in starting, operating, and growing home-based or small-scale business under PSFI’s MagBuhay and SKP Projects |
In spite of a high gender development index of 0.977, gender inequality remains pronounced in the Philippines, particularly in terms of labor participation and levels of income.

This is evident in the estimated GNP per capita of the country’s female population, which is still only 50% of the GNP per capita estimate for Filipino men. Moreover, the number of men belonging to the labor sector compared to women, is still prominently uneven at 79.7% vs. 51.1%, showing that many women still find it difficult to enter the formal workforce.

Supporting SDG 5 and the continued empowerment of women is a sound business move for any enterprise. This will drastically increase the private sector’s talent pool, open doors to fresh ideas and new perspectives, and inspire large populations of women to become a productive force for economic growth.

One example of how a business can achieve this is Unilever Philippines’ Kabisig Summits and Super Stores Program. To better distribute its food, home and personal care products, Unilever decided to tap the huge potential of mom-and-pop stores or home-based retail outlets, also known as sari-sari stores in the Philippines. Mostly managed by matriarchs and female family members, these microenterprises are ubiquitous in the Philippines and represent one of the most popular small-business concepts in the country.

By empowering these micro-entrepreneurs, Unilever significantly improves its distribution lines and reaches a wider market base. To improve the viability of these stores, Unilever conducts training programs on stock control, financial management, sales techniques, and customer service. Around 541,000 sari-sari store owners, most of which are women, have attended these summits. Unilever’s goal is to teach a total of 100,000 micro-entrepreneurs by 2020.

Another way for companies to extend their support for marginalized women groups is by actively finding ways to include them into their respective supply chains. Nestlé’s gender empowerment program in Lipa, Batangas, for instance, has transformed a community of housewives and jobless women living near its manufacturing plant into budding entrepreneurs. Through sewing skills training and short business courses, these women in Lipa City are now able to professionally construct garments and supply uniforms and other clothing supplies for the company’s manufacturing needs. The program has also expanded to three other communities close to other Nestlé factories. In 2016, the ladies received over 14 million worth of purchase orders. The program has also expanded to a Yard and Garden program which uses land within the factories of Nestlé allowing ladies from the community to plant in this area. The produce is then sold to the factory canteen and to factory employees, generating livelihood for the women in the community.

Similarly, PSFI’s MagBuhay (Maghanap-buhay sa Bahay or “work at home”) and SKP (Sanayang Kakayahan Pangangalakal or “improving entrepreneurial capacities”) has so far empowered over 17,000 idle and unskilled family members (mostly women) by creating opportunities for small businesses and providing training for basic “negosyo” skills.

Other business initiatives include the partnership of EDC with “Hapinoy” a few years ago, an NGO that empowered the women of the host communities of its Bacon Manito geothermal project in west Sorsogon. Hapinoy taught the mothers manning “sari-sari” stores skills on accounting and goods inventory.

These three community-development programs of Nestlé and PSFI are implemented with the support of the government’s Technical Education and Skills Development Authority, private training institutions, local government units, and various funding partners. EDC on the other hand partnered with an NGO, Hapinoy to use the village store in bringing products and services to communities.
The poorest communities in the Philippines are among the most vulnerable to natural hazards in the world, considering the number of storms and calamities that frequently hit the country.

With an average of 20 typhoons each year—many of which can quickly destroy shanty towns and informal settlements—some of the poorest communities in the Philippines are bound to a cycle of constant struggle year after year. The Global Climate Risk Index Report of 2017 recorded the highest calamities in the Philippines from 1996-2015 at 283 events.

For instance, Typhoon Haiyan, the strongest storm to hit the country on record, caused an estimated increase in the national poverty incidence by 1.9% and 30.3% increase in severely affected provinces in 2012.

This highlights the need for new insurance platforms that are able to cover more people, especially workers belonging to the country’s informal sector, including small-scale business owners, farmers, fisherfolk, domestic workers, and other contractual workers.

MICRO-INSURANCE SCHEMES IN THE PHILIPPINES

Philippine business concepts that are casting a bright light on the growing space of micro-insurance are Cebuana Lhuillier Insurance Solutions and Palawan Pawnshop’s ProtekTODO accidental insurance schemes.

Driven by the huge potential of this relatively new market, and boosted by the government’s target to insure at least 50% of Filipinos by 2020, these ventures are now able to provide micro-insurance policies at highly affordable rates. These include insurance coverages against natural and man-made calamities, accidental death, and motorcycling accidents, among other untoward incidents that threaten the security of those in the informal sector.

One of the oldest insurers in this field is Cebuana Lhuillier Insurance Solutions (CLIS), the micro-insurance arm of Cebuana Lhuillier, a large non-bank financial services provider in the Philippines.

The company now has over 20 unique micro-insurance products, including its popular Alagang Cebuana Plus Gold personal accident insurance which covers Filipinos aged 7 to 70 years old. For as low as P120/year, insureds can be covered for as much as P20,000 on accidental death, dismemberment and disablement, P5,000 fire cash-assistance, P5,000 micro-life and P5,000 murder and unprovoked assault. It launched the first microinsurance-dedicated app called MicroPinoy, embarked on a nationwide microinsurance awareness campaign in the community level and deployed eight “microinsurance-on-wheels” (vans) to far-flung rural areas to distribute microinsurance products.

Pera Palawan’s ProtekTODO accidental insurance plans are similarly designed to cater to the informal workforce with premiums that cost as low as P20 per certificate for a coverage period of four months.

All these plans are made more accessible to their target publics by keeping application requirements to a bare minimum. Some do not even require any sort of documentation or medical certification, and most can be activated using mobile phones and other innovative digital platforms.

Notably, CLIS has established a program called CLAIMS RAPIDO (Rapid Action in a Disaster-Stricken Area Operations). Within 24 hours of a disaster, the company sends employees to the affected area to immediately process the claims of policyholders.

Since 1999, Cebuana Lhuillier Insurance Solutions has covered around 7 million Filipinos in the bottom of the pyramid

Established in 1999, CLIS is able to use Cebuana Lhuillier’s extensive pawn-brokering business, with its 2,000 branches across the country, as a leverage to insure some of the poorest segments of Philippine society.
Gaps and Opportunities

More and more companies operating in the Philippines are beginning to realize that aligning their business goals with sustainability concerns is in fact good for the bottom line and their shareholders’ profit motive.

Most private companies, moreover, need an economically thriving and healthy population to succeed. A high incidence of poverty, coupled with weak food and health systems, limit business growth and are anathema to innovation and creativity—two of the building blocks of entrepreneurial vigor and success.

As evident in the new business models and livelihood support programs discussed in this section, investing in agriculture, nutrition, women, and micro-insurance can lead to lucrative ventures that also have the power to lift entire communities out of poverty.

More business solutions like these can be achieved if companies further align their efforts with parallel government programs. For example, agriculture-based companies may tap government agencies, such as the Department of Agriculture and the Department of Agrarian Reform, to explore financing schemes that are already being managed by these national government agencies.

For agriculture support, banks are also required by RA 10000 or the Agri-Agra Reform Credit Act of 2009 to set aside at least 25% of their total loanable funds for agriculture and fisheries credit. However, in 2015, only 15.22% was set aside as loanable funds — way below the 25% floor. A reason for noncompliance is that banks see the agriculture sector as having high risk of default. This law may be amended by determining the absorptive capacity of financial institutions for agricultural loans while ensuring that costs for agricultural production are met. An ecosystem of services to improve the capacity of farmers to access financial services is also needed.

Companies may also partner with the government’s gender empowerment and family-planning programs to put more women into the mainstream workforce.

Companies can further assist their beneficiary communities by linking them to more market opportunities within and outside their supply chains.
FINDING BUSINESS OPPORTUNITIES IN HEALTH CHALLENGES

SDG Targets Being Addressed

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases.

3.5 Strengthen prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

3.8 Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all.

3.c Increase substantially health financing and the recruitment, development and training and retention of the health workforce in developing countries, especially in LDCs and SIDS.
In the past few years, the Philippines has made strides in improving health services delivery across the country. Our life expectancy rate has increased to 68.26 in 2014 from 67.78 in 2010. Our infant mortality rate is down to 22.2% in 2015 from 24.4% in 2011. Notably, our National Health Insurance Program (NHIP) now covers 93 million Filipinos as of 2015. Of this total, 61 million or around 66% belong to vulnerable groups.

But despite these advances, our public health investments still lag behind our Asian and ASEAN neighbours. As of 2014, public health spending in the Philippines is only at 4.7% of our GDP, compared to the 5.2% average of many ASEAN countries and the 7.7% average of Japan, China, and South Korea.

The continued high cost of medicine and medical care, which still drive our poorest communities to scrimp on basic needs or totally forego healthcare, further widen these gaps. As of 2014, 55.8% of the total healthcare cost was borne by private entities (e.g. individuals, families). This indicates that while Philhealth benefits are at their record largest, they are still insufficient to ensure the financial security of the poorest in times of dire health needs.

Our maternal mortality rate as of 2015, moreover, continues to be at a high 114 deaths per 100,000 live births—a long way to go toward our target of 92 deaths per 100,000 live births.

All these challenges present a host of opportunities for many enterprising individuals and groups, especially those with medical and public health interests and backgrounds. New pathways to partnerships and tie-ups between differing sectors may inspire some of the best solutions we have yet to see in addressing these persistent health gaps. Multinational firms, too, with numerous branches and production plants across the Philippines stand to enjoy greater public trust and patronage by integrating the health concerns of their respective communities and customers into their business models.

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**Private Sector Initiatives on Health**

From 14 reporting companies, per category, %

- 19%: Improved health infrastructure and capacity of health workers
- 25%: Preventative Measures and Focus on Well-being
- 56%: Ensuring accessibility and affordability of healthcare services

**Total Disclosed Investments**

per Initiative Category from 14 reporting companies

- P180 M: Ensuring accessibility and affordability of healthcare services
- P120.1 M: Preventative Measures and Focus on Well-being
- P6.8 B: Improved health infrastructure and capacity of health workers
- P7.04 B: Total Disclosed Investments

- Ensuring accessibility and affordability of healthcare services
- Preventative Measures and Focus on Well-being
HEALTHCARE SERVICES FOR COMMUNITIES: From Big Energy Companies to a Small Community-based Clinic

Companies with power generation plants and production business operation sites in poor rural communities continue to recognize the need to extend health services to members of their fenceline communities.

Companies such as First Gen Corporation and Energy Development Corporation (EDC) are able to fill in some crucial gaps in health-care through Corporate Social Responsibility (CSR) programs that provide access to health to community members.

In partnership with local government health offices, First Gen conducts health programs and trains barangay health workers to immediately respond to community health needs in remote areas. The company also helps improve health centers through provision of infrastructure and equipment.

EDC provides health development assistance projects to health centers in 47 communities that host its geothermal and wind operations. The company focuses on three key areas:

a) capacity-building through health center improvements in infrastructure and equipment;

b) improved access to basic health services; and

c) heightened awareness on responsible parenthood or other health topics.

Pilipinas Shell Petroleum Corporation (PSPC), on the other hand, integrates a medical and dental mission into the activities of its refinery in Tabangao to mitigate or prevent any adverse effects its operations may have on its host community. While providing free medical services and improving its reputation, the company is also able to gather precise medical information that it can use to study to validate how their environmental measures are able to prevent adverse health impacts on the communities.

Another example of a business-driven program that targets community health is Jucone’s Contemporary Physical Therapy Services (JCPTS). Although much smaller in scale as a business, this innovative approach taps the spirit of community collaboration to create a rehabilitation program that helps the elderly and children with disabilities. Using community-based rehabilitation and an inclusive and sustainable grassroots approach that links the local government, interfaith groups, the disabled sector, JCI Marikina Marikit and immediate community members, JCPTS has managed to create a viable profit-based platform to extend effective physical therapy services to its community in Quezon City.

All these programs have significantly contributed to health targets of the SDGs at the community level. Through partnerships with government agencies, health units, and non-profits, EDC and First Gen, for instance, have trained hundreds of community health workers, enriched many community health clinics with much-needed equipment, and reached out to hundreds of indigent families by providing medicines. First Gen has so far invested nearly P28 million in these programs since 2008, while EDC has already invested about P100 million since it started pursuing health CSR programs in 1993.

17,300 Individuals provided with access to healthcare through First Gen’s CSR Program for Community Health & Safety
TRANSFORMING MOBILE PHONES INTO HEALTH TOOLS

New linkages between public charities, the medical sector, and telecommunications companies are now showing how mobile phones can become powerful tools to solve public health issues.

By tapping into the existing infrastructure and network of major telecommunication companies, new business approaches to health services, as well as traditional charities, are now able extend health services for marginalized communities and reach out to a bigger market base.

To directly address these challenges, Operation Smile collaborated with Smart to develop a web and mobile-based application to screen more new cases and capture relevant data remotely. This greatly facilitates the work of health workers and community volunteers in helping more patients, especially those in very remote areas. Ultimately, the group envisions this tool as the basis for a national cleft registry in which all marginalized children born with a cleft lip or palate are promptly identified and enrolled into a clinical pathway leading to surgery and recovery.

Another mobile-based innovation that is now able to provide health services to remote, marginalized, or socially isolated communities is Konsulta MD, a joint venture of Globe Telecom and Salud Interactiva.

Konsulta MD is a new business strategy that offers immediate medical attention at affordable rates. Functioning as a 24/7 health hotline operated by licensed Filipino doctors, the service offers medical advice, healthcare information, and permissible medication over the phone.

The company now has around 80,000 active subscribers and has conducted 6,000 successful consultations since its launch in August 2015.

Operation Smile
Philippines Patient Mapping Tool downloads to translate to at least 100 end-users and operate at least 2,000 patients every year

Konsulta MD
Has over 80,000 active subscribers and a total of 6,000 successful health-related consultations since launch in August 2015.

9,733 local residents have better access to healthcare

390 barangay health workers provided with supplies and training

47 barangay health centers equipped with medicine and equipment
**HEALTH FINANCING AND IMPROVED HEALTH TECHNOLOGY AND SERVICES**

With many of our healthcare facilities in poor urban and rural communities unable to hire top-notch practitioners or purchase the latest medical equipment, many Filipino companies are responding with business-related solutions to address this service gap. In the process, they are able to generate increased social values, a stronger moral license to operate, and even enhanced shareholder returns.

With this approach, companies identify underserved segments in rural markets, finance health ventures, maximize economies of scale, and provide underserved areas with medical equipment and health services for free or at a reduced cost.

Ayala Healthcare Holdings Inc. (AC Health)’s new clinics, FamilyDOC, is an example of how the private sector can augment health services in underserved areas as a core business strategy. Development Bank of the Philippines’ health financing scheme, called Sustainable Health Care Investment Program (SHCIP), is another shared-value approach that capitalizes on the bank’s core expertise to improve health services in areas where it is needed most.

**FamilyDOC**

has over unique 23,000 unique patients on record.

FamilyDOC is a new chain of primary care clinics that brings quality medical services nearer to communities, at an affordable price. It is wholly-owned by AC Health, the healthcare portfolio company of the Ayala Corporation. FamilyDOC offers the combined services of a clinic, a diagnostic facility, and a pharmacy. Its business proposition is to make quality healthcare more accessible and affordable to middle- and lower-middle-class communities. Services are delivered by trained Primary Care Physicians, and medical staff, at price points 10-40% lower than other private providers. Households by bringing such services closer to the targeted communities. FamilyDOC clinics also utilize an in-house Electronic Medical Record (EMR) system to securely store medical information across its clinic network. The capital requirement to start for a 100 square meter FamilyDOC clinic is pegged at P6 to P7 million. There are now six of these clinics in the Greater Manila Area and over 23,000 unique patients on record. In 2017, FamilyDOC will open an additional 18 clinics, with the goal of opening 100 clinics by 2020.

DBP’s SHCIP, on the other hand, serves entrepreneurs who wish to pursue a similar community-based clinic business like FamilyDOC. This innovative and highly strategic credit facility is meant solely for health sector projects. In particular, SHCIP grants loans and credit for working capital requirements, the construction or renovation of health facilities, and the acquisition of any equipment or technological system that improves health services.

DBP’s timely program is also able to support partnerships between various sectors, as well as fresh strategies that work for an integrated health care delivery system in the country. The program is accessible to both public and private sector health initiatives in need of working capital or additional funds. With DBP investing a total of P6.8 Billion in the sector as of June 2016, this program has so far extended assistance to at least 49 public and private hospitals. It has also supported a total of 151 health sector projects nationwide and added at least 490 hospital beds to the country’s hospital bed inventory. At least 20% of its total loan accounts are held by small-scale private providers.

Other notable business programs that are able to strategically provide medical equipment for under-served communities are the programs of Shell Philippines Exploration BV(SPEX) in Palawan and Philips in Tacloban.

What began as a human resource concern for SPEX in Palawan has become a larger community health program that now benefits...
even non-employees of SPEX’s Malampaya Deep Water Gas-to-Power Project. When the gas project began in 2001, SPEX initially recognized the lack of medical facilities in the province to handle accidents and other urgent medical requirements for its workforce. In partnership with the Palawan Adventist Hospital Charity Program, the company thus provided counterpart funding for the hospital’s charity program, with a focus on burns, trauma, infectious diseases and mother and child care. Today, the program has expanded to include treatment for underprivileged and indigenous groups. Philip’s program called FriendlyCare Birthing Home and Family Health Clinic in Tacloban is another example of how a company’s business activities can result in improved medical facilities for remote communities. By opting to donate Philips’ ultrasound, ECG and fetal monitor equipment to an underprivileged community, the company was able to simultaneously market its new products and address preventable maternal deaths in a targeted region.

Asian Eye Institute (AEI), a sister company of First Gen and EDC has a CSR program called “Bringing Hope to Life: Cataract Surgery Mission,” since 2011. AEI runs its 100 Eyes Cataract Surgery Program operating on 100 eyes, contributing to the country’s sustainable goal of providing healthy lives and wellbeing among its people. For many indigent patients, cataract removing for a clear vision is life changing. Patients can go back to work and become better members of the community.

DBP’s SHCIP supported the following:

- 1,847 indigent patients in Palawan served under SPEX’s Palawan Adventist Hospital Charity Program from 2000 until September 2016
- =10 Public and Private Hospitals assisted
- =100 Additional Hospital Beds
- 490
PREVENTIVE MEDICINE: Immunization and Wellness

One area in healthcare that offers a wealth of opportunities for pharmaceutical companies, hospitals, and even upcoming health enterprises is preventive medicine, particularly immunization and products and services that promote a healthy lifestyle. With the growing awareness among Filipinos of the importance of preventive healthcare approaches, this business segment is expected to grow in the coming years.

Between 2011 and 2013 Glovax distributed 1.6 million vaccines, of which over 1.4 million doses were administered to middle and low income Filipinos

Many Filipino families, for instance, still do not have access to immunization and vaccines that can shield their infants from various infections. The access of the elderly to vaccines, too, can prevent untimely deaths and is an important health topic that is now finding support from private groups. Finding ways to make vaccines more affordable and easily accessible can clearly save millions of lives as well as provide significant returns on investment for those with the foresight and acumen to compete in this field.

One example of such a business case is OKS ang Bakuna Ko Laban sa Pulmonya ("my vaccine fights pneumonia"), a public-private partnership between PhilHealth and Merck Sharp and Dhome (MSD) Philippines. The program provides pneumococcal vaccination at discounted rates to PhilHealth Lifetime Members and their dependents. The partnership is supported by an information campaign to educate older citizens about the great benefits of vaccination to prevent pneumococcal infections and complications leading to meningitis and pneumonia. It also informs younger Filipinos about the benefits they can enjoy in their senior years if they continuously pay their premiums, thereby also strengthening PhilHealth's financing campaign.

Another strong entrepreneurial case for entering into the vaccine business is Glovax Biotech Corp., a fully integrated vaccine company in the Philippines that imports, distributes, and retails a complete line of vaccines at an affordable price. The company’s main goal is to improve vaccine access for middle to low income Filipinos.

According to the company, many of our current private healthcare providers cater only to the upper income segment of the population. By distributing vaccines from multinational pharmaceutical corporates (MNCs) to 3,200 community clinics and hospitals in 20 provinces (many of which do not have access to vaccinations), the company brings significant social impact, while growing its business. Notably, Glovax has administered over 110,000 vaccines for free since 2003 in partnership with socio-civic organizations as a way to market its services. Currently, Glovax...
According to the 2014 Philippine National Health Accounts, out-of-pocket (OOP) costs comprise 55.8% of the total health expenditures. Each Filipino spent P5,859 in 2014 for health, an 8.5% increase from P5,400 in 2013. Of this, medicines account for the highest share among the total health and medical expenses. A high OOP is damaging to the health of the poor as it leads to increasing mortality among the marginalized (Plumper and Neumayer, 2012). Therefore, increasing the accessibility and affordability of quality medicines is essential in poverty alleviation.

Generika is the pioneer in the retail of quality generic medicines in the Philippines. From its beginnings in 2003, it has grown to a network of over 690 stores, nationwide. Generika offers customers savings of up to 85% on their medicines, while still ensuring that medicines are sourced from reputable local, and international manufacturers. It carries its own house brand of medicines, called Actimed, and wellness products, called Nutrawell. More recently, Generika has expanded into providing value-added services, such as the free Gamot Guide (Medicine Guide), which gives customers information on the medicines they purchased, including dosages, contraindications, and possible side effects. As part of its advocacy, Generika actively promotes generic medicines, and rational drug use.
Gaps and Opportunities

New approaches

Two major milestones achieved in public health financing in the Philippines are the establishment of PhilHealth through the National Health Insurance Program (NHIP) in 1995 and the enactment of the Sin Tax Law in 2012, which bring substantial and increased government revenues, a bulk of which goes to public health programs. Though this fund has been used to increase the number of Filipinos enrolled in PhilHealth, the greater challenge is to effectively mobilize the money for public health.

Given the bigger budgets that are now courséd through PhilHealth, the private sector stands to gain from developing new business approaches that work for Universal Health Coverage (UHC) and Primary Health Care (PHC). The goal of UHC, says the World Health Organization, is to ensure that all individuals and communities obtain the health services they need without suffering financial hardship. [1] The complementary goal of PHC, on the other hand, is better health for all by reducing exclusion and social disparities, organizing health services around people’s needs, integrating health into all sectors, pursuing collaborative models of policy dialogue, and increasing stakeholder participation.[2]

With the increase in resources for PhilHealth, the private sector can work with the government to strengthen the delivery of PHC and achieve greater UHC coverages. Aside from focusing on curative care, they could expand their involvement in the delivery of PHC (e.g., vaccinations, health promotion, water and sanitation, etc.). Companies that deliver health services could work with PhilHealth under a capitation scheme which can be used to deliver a package of preventive health services to a target population.

Possible partnerships

As seen in the partnerships created by the programs in this section, more companies stand to benefit from a heightened sense of cooperation with other companies, as well as by collaborating with the government and nonprofit agencies. Through creative linkages, companies can achieve new synergies, maximize resources, and cut down on business costs while expanding their geographical reach.

Following through on its partnership with Operation Smile, Smart Communications may for example choose to extend the program to cover other major illnesses. The company could work with government to create a database of rural hospitals or municipalities, along with their specific needs, such as equipment, training, etc. This database can be made available to pertinent government agencies, sponsor companies, and various donors, as an avenue to expand UHC and PHC, generate philanthropic interest, new partnerships, and also attract new Smart subscribers. In addition, Smart and the hospitals under the MVP Group can explore innovative tie-ups as they belong to the same conglomerate.

Glovax, too, may opt to tap FamilyDoc’s growing network of clinics to distribute their vaccines, as both companies share similar social missions. Glovax can also initiate discussions with PhilHealth to include their vaccines as one benefit in the NHIP.

More companies can also partner and combine their internal wellness drives, and share best practices and pool resources, to promote better health among employees and achieve significant outcomes at a wider scale.

In terms of scaling up efforts, Konsulta MD has the strong potential to expand its services by including video calls in its menu of services. DBP may enhance its information campaigns to inform more health-related businesses about the bank’s innovative financing scheme.

Multinational pharma companies may also help the government educate the general public on early detection of sicknesses depending on their markets and fields of expertise. This move, in turn, can provide them with a better sense and understanding of the dynamics of the Philippine market, aside from giving them wider publicity mileage and brand recall.

The business opportunities in providing quality health services to achieve greater social inclusion and a more economically productive population are numerous. In support of the SDGs thrust to leave no one behind, companies can design new strategies that specifically reduce health inequities by actively targeting the poor and marginalized in innovative ways.
Children from a public school in Tawi-Tawi now have access to digital learning tools and content, through the Smart TechnoCart.
SDG 4, which aims to promote lifelong learning and ensure inclusive and equitable quality education for all, is one of the Global Goals closest to the heart of many businesses in the Philippines.

Even before the advent of corporate social responsibility in the country in the 1960s, local enterprises were already making it a point to allocate a big fraction of their philanthropic spending to fund public school infrastructure and provide scholarships to deserving students.

This tradition lives on in many companies in the country and is largely reflective of the premium Filipinos place on education and its ability to improve one's lot in life.

Many companies in the Philippines thus have institutionalized CSR programs that give out scholarships to bright but underprivileged students. Many also extend educational loans at minimal interest rates to employees who have insufficient resources to send their children to good schools.

Beyond the country's philanthropic tradition of giving back through scholarships, a good number of companies are now striking out in new directions with fresh concepts and more strategic approaches to achieve wider impact and scale in education.

Telecommunication companies are parlaying their investments in technology by using them as platforms to bridge persistent educational gaps. Other companies, including some of our biggest conglomerates, are even establishing their own schools to make inclusive education an integral part of their business portfolios.

SDG Targets Being Addressed

4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

4.3 By 2030, ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university.

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and men, achieve literacy and numeracy.
As a result of rapid advances in mobile technology, telecommunication companies in the Philippines are looked upon by a growing public as our leading innovators, most capable to break barriers to learning, communication, and access to information.

Living up to this role and reputation, Globe Telecom, Inc., PLDT, Inc., and Smart Communications Inc., the leading telecommunications companies in the country, have further stepped up their efforts to improve the country’s level of digital literacy, which is becoming increasingly essential among younger groups to participate in social discourse, access digital archives and resources, and even seek further educational opportunities and eventual employment.

PLDT, Smart Communications, and Globe Telecom are also aiming to resolve issues related to internet access among underfunded schools. This move is timely as the Philippines still lag behind foreign counterparts in terms of internet access ranking of 61 out of 138, according to the Global Competitiveness Report 2016-2017. Out of 46,739 public schools nationwide, only 26% public schools are connected to the internet. Moreover, about 12% of our public schools still have no access to electricity.

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**Private Sector Initiatives on Education**

From 11 reporting companies, per category, %

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
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<tbody>
<tr>
<td>ICT and ICT-Inclusive Education</td>
<td>22%</td>
</tr>
<tr>
<td>Financial assistance through scholarships and lending</td>
<td>22%</td>
</tr>
<tr>
<td>Improving STEM Education</td>
<td>17%</td>
</tr>
<tr>
<td>Addressing resource gaps and improving quality of education</td>
<td>17%</td>
</tr>
<tr>
<td>TVET</td>
<td>11%</td>
</tr>
<tr>
<td>Access to education through affordability</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Percent Share of Reported Investments**

Of 10 Reporting Companies, per initiative category *

<table>
<thead>
<tr>
<th>Initiative Category</th>
<th>Percent Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial assistance through scholarships</td>
<td>7.3%</td>
</tr>
<tr>
<td>Access to education through affordability</td>
<td>19.3%</td>
</tr>
<tr>
<td>Financial assistance through lending</td>
<td>71.5%</td>
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* P13.9 billion total amount of reported investments
GLOBAL FILIPINO SCHOOLS AND THE DIGITAL THUMBPRINT PROGRAM

Globe Telecom has programs such as Global Filipino Schools (GFS) and Digital Thumbprint Program that help integrate information and communications technology (ICT) in our public school systems.

The Global Filipino Schools (GFS) Program is a long-term partnership of Globe with the Department of Education which covers two sustainable interventions that help forward 21st century learning in public schools nationwide. The GFS Program provides schools with free internet access, tech devices for mobile learning (tablets, projectors, mobile phones, modems, pocket WiFi dongles, chromecase dongles, virtual reality goggles, a mobile cart and a mobile charging station), teacher training on 21st century learning approaches, and tech integration in the classroom. From just 1 school in 2012, Globe currently operates the GFS Program in 135 of 221 DepEd divisions with 142 schools rolled-out in total, now covering 16 of 18 regions of the country. Program coverage of all 221 divisions will be achieved as early as 2018.

Digital Thumbprint Program, the cyber-wellness program of Singtel and Optus in Singapore and Australia, is a workshop series for students and teachers on responsible digital citizenship and cyber wellness. The workshop series is composed of the following modules:

- Cyber safety and security;
- Online etiquette and responsibility; and
- Leadership and empowerment through technology

Each module was designed to increase students’ digital intelligence to enable well-informed choices when online. Through nurturing workshop ambassadors/trainers, the program has now reached 6,347 public and private high school students, with 911 public school teachers empowered to teach the program to their students. A partnership with DepEd this 2017, includes a national cascade to the teacher trainers in all 221 divisions, and considerations for curriculum integration of the workshop modules.
PLDT and Smart Communications run two innovative and strategic programs that enhance the delivery of early childhood educational services in the country. Targeting poorly funded kindergartens, Smart’s TechnoCart and Batibot programs use the latest gadgets and mobile technology to open a wealth of learning opportunities to very young students.

Under the Smart TechnoCart program, each beneficiary school receives a ‘technology-cart’ containing a projector, a laptop, one teacher tablet, 20 student tablets, and one Smart Bro Pocket Wifi to connect the school to the internet. The equipment comes loaded with learning and teaching modules, as well as relevant applications.

One of the notable features of each of these carts is the pioneering app Batibot, the first interactive mobile app for kids in Filipino that is aligned with the DepEd’s kindergarten curriculum. The app is based on the popular children’s educational TV show Batibot, making it highly engaging for preschool learners and even their parents who grew up watching the show.

Designed for kids from Kinder up to Grade 3, the app aims to help children develop literacy through learning the alphabet, storytelling, karaoke, and games. The app also supports early literacy by nurturing an early love for literature through a storytelling feature called Kwentong Batibot (Batibot Stories). As of April 2017, the app has reached 437,101 downloads from the Google Play Store and the Cosmic Pinoy App Store.

For all these innovations, Smart’s TechnoCart program won a Social Contribution Award at the prestigious World Communication Awards (WCA) ceremony. So far, TechnoCarts have been donated to 40 beneficiary schools with a total of 185 kindergarten teachers and 9,841 kindergarten students. Schools may apply directly to Smart to receive the program package for free, or donors or school supporters may nominate their beneficiary school to the program.
ADDRESSING GAPS IN TEACHER RESOURCES: Gabay Guro and Infoteach Outreach

PLDT is also implementing various initiatives through corporate and government partnerships to boost the ICT capabilities of more public schools. Using the company’s extensive digital infrastructure, PLDT has managed to create programs that enrich the capacity and skills of faculty members while integrating ICT tools in their teaching methods. These programs are Gabay Guro and Infoteach Outreach.

According to PLDT, many public high schools and universities, as well as their teaching staff, still lack the proper 21st century technology to compete in an advancing economy. As such, the company established Gabay Guro—the flagship program of PLDT-SMART Foundation.

Aiming to “change the lives of those who changed ours,” Gabay Guro has six components called “pillars of learning.” These are a) Housing and Educational Facilities; b) Scholarships; c) Trainings; d) Livelihood Programs; e) Broadband and Computerization; and f) Teacher’s Tribute.

According to PLDT-SMART Foundation Chair Manny Pangilinan, the gratitude we owe teachers in shaping our minds and lives can never be repaid. But through Gabay Guro, their company can at least show their deep gratitude by funding the postgraduate studies of teachers and by providing them additional livelihood support.

Complementing Gabay Guro is their Infoteach Outreach Program, a partnership between PLDT, Intel Philippines and UP Open University. This program opens more opportunities for public elementary and high school teachers to hone their skills and acquire greater ICT knowledge.

Gabay Guro is now working with 47 partner institutions and has awarded scholarship grants to 1,123 teachers. The program has also reached out to over 15,000 teachers through various seminars and short courses. Infoteach Outreach, on the other hand, has produced 562 trainers and reached 159 public high schools in 38 cities and municipalities. Since 2004, it has likewise conducted workshops and seminars to enhance the computer knowledge and technical skills of thousands of students and teachers.

TechnoCarts Donations

40 Kinder schools
185 Teachers
9,841 Kinder students

PLDT Infoteach Outreach Program

13,586 students and teachers trained to understand computer and technical skills under PLDT’s Infoteach Outreach Program

Gabay Guro has six components called “pillars of elearning”

Housing and Educational Facilities
Scholarships
Trainings
Livelihood Programs
Broadband and computerization
Teacher’s Tribute
Out of 138 countries, the World Economic Forum’s Global Competitiveness Report 2016-2017 ranks the Philippines as 41st on capacity for innovation, 72nd on the quality of scientific research, 78th on availability of scientists and engineers, and 79th on the quality of math and science education.

Many attribute this lackluster performance to the low budget allocation for scientific research and development among our schools. For instance, only 4.8% of all public elementary schools have their own science laboratory. Of this already small fraction, 42% is located in the capital region as compared to 2.3% in conflict-affected ARMM region.

Businesses are responding to this pressing challenge by creating CSR and marketing programs that are able to raise funds for new equipment and innovative teaching strategies. Among the most notable and far-reaching of these initiatives are the Dynamic Learning Program, which Smart and PLDT-Smart Foundation are helping implement in more schools, Smart Wireless Engineering Education Program (SWEEP), and Aboitiz’s Special Science Elementary School (SSES) and TechVoc.

Under the Smart Wireless Engineering Education Program (SWEEP), Smart partners with colleges and universities to help improve IT and engineering education in the country.
DYNAMIC LEARNING AND WIRELESS EDUCATION THROUGH PLDT AND SMART

The Dynamic Learning Program promotes independent learning among students to improve their academic outcomes. Here, students focus more on practice and activity-based learning. The students learn modules in science, technology, engineering, and mathematics. Developed by Ramon Magsaysay laureates and Filipino physicists Christopher Bernido and Ma. Victoria Carpio-Bernido, this teaching method was first implemented in the Central Visayan Institute Foundation (CVIF) in Jagna, Bohol in 2002. Since then, the teaching strategy has been able to improve the academic performance of students in more than a thousand public and private schools nationwide.

Meanwhile, the Smart Wireless Engineering Education Program (SWEEP) uses the company’s existing infrastructure and technological expertise as leverage to elevate the teaching of Information Technology (IT) and Electronics Communications Engineering (ECE) courses. The program has now established a network of 42 colleges and universities that offer ECE and IT degrees, and it has provided scholarships to 67 students. Almost 35,000 faculty and students from 70 colleges have been trained on technology, and 153 wireless prototypes have been developed by students under this program. In addition, SWEEP holds an annual innovation competition called the SWEEP Awards.

According to the company, this yearly prize ‘encourages students to scan their environment, identify pain points, design and create a working technology-based solution, and finally test the market for potential profit. It is an end-to-end exercise that can lead to commercialization of what starts out as school projects.”

ABOITIZ FOUNDATION: Special Science Schools and Technical Learning

Aboitiz’s SSES and TechVoc schools address the lack of our school’s STEM (Science, Technology, Engineering, and Mathematics) facilities and equipment, our limited number of laboratories and the lack of qualified science and math teachers in many regions.

SSES is implemented in partnership with the DepEd and is aligned with the government’s thrust for a stronger focus on science-based skills and platforms among young students. To date, the program has created 10 SSESs, trained 23 teachers, constructed or refurbished 39 classrooms, and provided laboratory rooms, equipment, and ICT-based learning resources, as well as relevant textbooks and supplementary materials.

Complementing this drive is Aboitiz’s TechVoc, which uses vocational-school learning as an alternative solution to help about 80% of high school students who don’t have the means to pursue a full college education.

TechVoc complements the government’s K-12 program by teaching technical skills that lead to immediate employment. Aboitiz has so far adopted 35 tech-voc schools, constructed or refurbished 87 classrooms and laboratories, and trained 71 teachers under this platform. On top of these numbers, TechVoc students are also given reference books, tools, and equipment, while TechVoc teachers receive training for NCII certification. The company’s total investments in both SSES and TechVoc has reached over P80 million as of 2015.
DEVELOPMENTAL FINANCING FOR EDUCATION

Financing affordable and inclusive educational programs is a key strategy of the Development Bank of the Philippines. In fact, two of the biggest educational financing programs in the country today—DBP’s Educational Fund Program (DEFP) and DEEP (Endowment for Education Program)—are managed by this state-owned developmental bank.

As a development financing institution (DFI), DBP’s efforts are well aligned with the goals of the UN SDGs.

DEFP extends strategic loans that empower schools to deliver better quality education to their constituents. This financing program supports both public and private learning institutions at all school levels, especially those in poor regions and provinces. Qualified or eligible borrowers under this program include local government units, educational institutions that are recognized by the Commission on Higher Education (CHED) or TESDA, and training centers accredited by government regulatory bodies. Aside from its regular credit line, the program has a component that also provides loans to educational institutions that seek to extend retail on lending services for their students who need assistance. As of August 2016, the program’s total loan portfolio has reached P2.49 billion comprising of 106 projects. The bank has so far invested P10 billion to keep this program in motion.

DEEP, meanwhile, is now on its 8th year of implementation and has disbursed more than P800 million to support the schooling of over 3,500 scholars. This CSR initiative provides scholarships to the brightest and most promising youth students from low-income families. Aside from its main scholarship component, DBP is aiming to ensure the immediate employment of its graduates through proper course selection and by partnering with other institutions and potential employers. It also operates a pay-it-forward scheme through the DEEP Scholars Association (DEEPSA), encouraging graduates of the program to volunteer, and give support and resources to upcoming scholars.

DEEP has graduated a total of 2,042 scholars as of September 2016. Out of this number, 1,625 are now employed and 435 are actively contributing to the program’s heightened efforts.

According to DBP Vice President Paul D. Lazaro:

Financing is considered as a key element for the success of the new sustainable development goals. The international conference on financing held last year in Addis Ababa set bold measures to refit global financial practices to generate sustainable development investments.

For DFIs, this is significant in that it spells out not only their effectivity in achieving productivity targets on the level of the organization but also their relevance in contributing to their host country’s economic, social, and environmental objectives which are the pillars of sustainable development.
INCREASED ACCESS TO AFFORDABLE QUALITY EDUCATION

Two Philippine conglomerates that have recently entered the educational business are Ayala Corporation and PHINMA Corporation (formerly Bacnotan Consolidated Industries, Inc.) and Ayala Corporation. Both companies are notable for their recent ventures in education having established AC Education and PHINMA Education Holdings, respectively, with the end goal of making quality education inclusive and a lot more affordable for low-income groups. Ayala started its chain of affordable private high schools in 2013 with its Affordable Private Education Center (APEC Schools). At present, AC Education has approximately 18,000 students in its APEC Schools (Grades 7-12) and University of Nueva Caceres (K-12 and higher education) in Naga City. From 3,300 students and 24 branches in AY 2015-16, APEC Schools now has 10,500 students as of AY 2016-2017 with 27 branches in Metro Manila, Rizal, Cavite, and Batangas.

Turning their developmental advocacies in education from philanthropy into sustainable business ventures, both Ayala and Phinma are directly tackling poverty and limited resources—cited by many as the most pressing and common reason among students who drop out and perform poorly—by offering an affordable education option.

According to AC Education “All-in costs at APEC Schools are among the most affordable for private schools in the Greater Manila Area.” The school charges as low as 22,200 (USD444) in annual fees including books, placing it in the lowest quartile among private high schools in the Philippines in terms of fees. The schools are also strategically located at the center of targeted communities to lower student transport costs. APEC School fees are almost comparable to government’s per capita spending for public school education of P 21,184 per year in 2014.

AC Education “is committed to delivering high quality and affordable education that significantly enhances the employability of its graduates. This is our way of helping address the large gaps in the quality, price, and accessibility of topnotch education in the country, through innovative entrepreneurial and educational approaches.”

PHINMA articulates similar goals. In its submission to the UNDP-PBE portal, the company said:

“PHINMA Education Network seeks to create opportunities for communities in the Philippines to have accessible, quality education. We offer not only affordable high-quality education, but also a brighter future for globally competitive Filipino professionals and workers. To fulfill this vision, the PHINMA Education network aims to create graduates that are competitive in the global market, while at the same time, empowering them and their families to live a life that matters.”

The challenge for both companies now is how to sustain their entrepreneurial zeal and commitment, while staying profitably afloat, especially when the market becomes volatile.

“It took PHINMA 10 years to build up its education business into one that would generate respectable profits,” said the company.
Gaps and Opportunities

For more Philippine businesses to help bring about meaningful change in our educational system, a new breed of partnerships must come together to leverage on some of our private sector’s most powerful assets: its capacity to innovate, its supply chain, and the inherent passion of the Filipino people and workforce to support corporate giving through education.

Despite the country’s advances in some key educational fronts, many studies still show considerable gaps in educational achievement. For instance, the gap between school achievements among boys and girls continue to be wide, with boys at the surprising disadvantage in almost every single outcome measure. According to recent studies, boys are more likely to drop out or attract disciplinary problems and achieve low marks in the Philippines.

The divide between urban and rural corporate educational spending likewise continues to widen, with schools in the capital region and highly urbanized cities receiving most of the attention of private donors.

Schools that still have no access to the most basic services, such as electricity, are now overlooked as providing internet connectivity becomes an even more popular marketing drive. About 12% or 5,743 public schools in the country still have no power connections. In the coming years, many hope that the government, in partnership with energy companies or other multinationals with production plants in remote areas, may find business solutions for this glaring developmental gap.

There are also instances where schools are accredited yet lack the necessary facilities and equipment to properly fulfill their mandates. A policy amendment requiring assets for accreditation can help address this. The private sector can still contribute by assisting in acquiring these resources.

Nonetheless, opportunities for classroom-less school systems can be explored and an ecosystem of financial services for students’ continued education be drawn up.

“Those who come to us are children of farmers, tricycle drivers, and manual laborers. They cannot pay tuition fees upfront. So we developed our strategies in educating the poor. We allow them to pay whenever they can, give them some leeway, and offer scholarships aside from our already low fees.”

“Even though we’re focused on education for the poor, we made it clear to ourselves that it is still a business and it cannot be run as a charity,” said PHINMA executives. “That’s the real challenge for us—providing quality education that is both accessible to the poor and profitable for the company.”
02

SDGS on the Economy
AIMING FOR ECONOMIC INCLUSION

Beyond their specific targets, the SDGs, as a whole, represent a sea of change in developmental funding. Moving away from dole-outs and aid as the primary means to help developing countries, world leaders now agree that trade and inclusive economic development are the best ways to put more people into the economic center and ultimately out of poverty.

In this light, the participation of groups that have been excluded for so long in economic activities is absolutely essential. Considering how millions of people the world over depend on businesses for their livelihood, the role of the private sector in ensuring the success of the SDGs becomes even more vital.
FOSTERING ECONOMIC GROWTH
In the Philippines, the private sector employs an estimated 48.5% of our entire labor force. This clearly indicates that local industries have the great capacity to impact the lives not only of millions of employees, but also of millions more who are part, in varying degrees, of the supply chains of many businesses.

Based on the submissions that UNDP and PBE received for the first edition of this report, we are heartened to see that a good number of Philippine companies are already doing a great job in pushing inclusive approaches into their business strategies and agenda.

If the number of such businesses increase over the next few years alone, we are certain that the Philippines will quickly advance, alongside a stronger business environment, in its goal to establish permanent pathways to progress for numerous communities still living below the poverty line.

In this section, we survey the extent of the Philippine private sector’s contribution to inclusive and equitable economic growth. We also identify gaps and recommend areas that entrepreneurs may pursue to achieve greater scale and stronger impact.

**SDG Targets Being Addressed**

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training.

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.
Private Sector Initiatives on
ECONOMIC GROWTH
SHARED VALUE THROUGH ECONOMIC CONTRIBUTIONS

Businesses fuel the economy through job creation, generation of public revenue for governments, and expanding economic opportunity along their value chains. Based on the results of the 2014 Annual Survey of Philippine Business and Industry (ASPBI), the total number of establishments with total employment (TE) of 20 and over in the formal sector of the economy was recorded at 35,009 in 2014. Total employment grew by 3.8 percent to 4,127,623 from 3,978,185 workers in 2013. Total compensation paid to employees comprising of payment for gross salaries and wages of employees and other benefits paid by the establishment amounted to P 1.2 trillion, up by 5.5 percent from P1.1 trillion recorded in 2013.

Based on the 2015 Sustainability Reports of 16 companies, the total revenues generated amounted to P 2 trillion, with 49 percent or P 972 billion of revenues distributed to key stakeholders—25 percent paid to suppliers, 20 percent to government, shareholders, and capital providers, three percent to employees, and 0.08 percent donations to communities and charities. Fifty-one percent of the revenues generated amounting to P 1 trillion were retained and reinvested.

**Economic Value Distributed and Retained**

based on 2015 SRs of Sixteen Companies

*In million pesos*

- Employee wages and benefits, less training fees for employees
  - **66,240.71**
- Compensation for all suppliers and contractors, including training fees for employees
  - **508,179.7**
- Sum of dividends to all shareholders and interest payments to creditors
  - **275,151.7**
- Taxes and licenses paid to government
  - **121,106.3**
- Donations to communities and charities
  - **1,506.75**
- Retained and reinvested

**Private Sector Initiatives**

of 15 Reporting Companies on SDG 8, per category

- Creating connections to wider markets and opportunities
- Infrastructure and ICT Support
- Education to Employment and Decent Work
INCLUSIVE EMPLOYMENT MODELS

More Filipino companies are now recognizing the huge potential in pursuing inclusive hiring programs while partnering with a broader base of sectors. Unilab Foundation’s Project Inclusion, which uncovers a host of business benefits from hiring Persons with Disability (PWDs), is a good example of such program.

Project Inclusion believes that given the right opportunity and proper support, PWDs can make their unique contributions in the workplace. By carefully matching the exceptional abilities of the PWDs, with gainful job opportunities, the program has managed to create an inspiring way to contribute to the bottom line while challenging outdated assumptions in hiring.

The program has proven, by way of solid research and practice, that the hiring of PWDs mutually benefits the company, the team, and the person.

Through partnerships with groups from the government, academe, socio civic and private sectors who believe in workplace inclusion, the program has so far given 121 PWDs access to meaningful work, with 16 companies now actively hiring PWDs. The program has also attracted 30 volunteer job coaches and 50 corporate and government partners. It has produced one job matching website, a source book documenting successful cases of workplace inclusion, and a hiring manual focused on Persons with Neurodevelopmental Disability.

Three other business models that actively seek out disadvantaged groups in their hiring strategies are Messy Bessy, Human Nature, and Rags2Riches. All three companies cater to a socially responsive lifestyle market, and all produce personal or home products that are quickly finding their niche in the local fashion, beauty, and home-care industries.

Rags2Riches, for instance, is out to prove that fashion and sustainability are complementary concepts. The company partners with community artisans around the country to create “eco-ethical” fashion and home accessories using upcycled materials, overstock textiles, and indigenous fabrics.

The company gives representation in its management team and board for their artisans and designers. “We can’t monopolize the conversations and decisions that affect so many,” they say. “Opening opportunities for livelihood is not enough, we have to open opportunities to decision-making and governance.”
Gandang Kalikasan’s Human Nature, meanwhile, is an online shop and distributor of beauty and personal care products, as well as home and wellness items, that are natural and locally made. Branding their initiative as “pro-Philippines, pro-poor, and pro-environment,” a group of Gawad Kalinga volunteers established Human Nature to develop safe and sustainable products using ingredients from local plants and produce.

According to its founders, Human Nature commits to providing job security and dignified wages to improve the quality of life of their workers. Working with 30 community farms, the company provides full benefits, regular employment, and a salary rate that is 70% more than the minimum wage in Metro Manila. They also invest in skills training, sustainable technology, infrastructure, and values formation, and are willing to finance some ventures of their suppliers to help their partners expand. All these have enabled Human Nature to reach over 30 branches nationwide.

Messy Bessy is another producer of home and personal care products with a timely business goal. Since it was established in 2007, this business has sought to provide education, employment, and rehabilitation for young adults exposed to various risks, including human trafficking and physical abuse.

According to the company, “We are in business to improve the lives of at-risk young adults in our community. Through the years we’ve been able to design and execute a program that allows us to provide education, on-the-job-training, work ethic enhancement and values formation.”

Today, more than 60% of Messy Bessy’s workforce are at-risk young adults. To further its mission of helping more disadvantaged young adults, Messy Bessy put up a non-profit called Helping Ourselves Through Sustainable Enterprises (HOUSE) Foundation in 2015. HOUSE Foundation aims to replicate the same programs that Messy Bessy provides to its beneficiaries to other social enterprises, businesses or organizations. This allows the business to market itself as a highly responsible brand and a leading social enterprise in this front.
TRANSFORMATIONAL BUSINESS

TRAINING FOR DIRECT EMPLOYMENT

One pioneering company that has managed to create a business model providing inclusive employment is BagoSphere.

BagoSphere recruits disconnected youth and gives them the skills they need to achieve lifelong personal and professional success and fundamentally change their life trajectories. Their curriculum follows a combination of TESDA NCII Certified Program, and a task-based approach to teach skills for in-demand entry level jobs. One of BagoSphere’s programs, the ASCEND Job Preparation Program has trained over 900 graduates since 2013, placing 85% of them in partner companies within two months of graduation. They are also the top recruitment provider for the largest BPO company in Negros Occidental. BagoSphere has also made it very simple for low income students to find a study now pay later loan, by partnering with one of the leading MFI NGOs in the Philippines and designing an innovative risk-sharing model.

The program is a good example of how to resolve the mismatch between the technical and practical skills of our labor force and the human capital needs of our industries.

85% of Bagosphere’s ASCEND Program were hired within two months after graduation

INCLUDING PARTNER COMMUNITIES IN THE SUPPLY CHAIN

Without losing track of their profit motive, some of the country’s biggest brands, as well as a new breed of social enterprises, are actively integrating formerly marginalized groups into their respective value chains.

As proven by the success of these companies, it is increasingly becoming profitable for a host of business concepts to partner with micro-entrepreneurs, farmers, and even remote rural communities as a way to advance corporate goals.

Today, these inspiring partnerships are transforming underserved communities into dynamic new markets and new stable sources of supply.
STRENGTHENING THE SUPPLY CHAIN BY DIRECTLY ENGAGING FARMERS

Mindanao-based Bali Oil Palm Produce Corp. is banking on its vital partnership with poor farming communities, such as the Kalilangan Oil Palm Growers Association, to expand its palm oil production venture.

The goals of this multibillion venture are aligned with the Inclusive Business in Mindanao initiative, a partnership between the Philippine Business for Social Progress (PBSP) and the Mindanao Development Authority (MinDA) to accelerate private sector investments in Mindanao.

In partnership with the KOPGA, Bali Oil is developing 3,000 hectares in 2017 and eventually to about 60,000 hectares of plantation in Misamis Oriental and Bukidnon in the next next years. The company worked with the DBP to grant KOPGA over P300 million in collateral-free loans, over a 10-year period, and at 8% annual interest. This will be in the form of best in class agricultural inputs provide by Bali Oil, while KOPGA will provide the labor as equity. In addition, Bali Oil will transfer the oil palm technology through technical training and services, all of which will lead to increasing the growers income from the present P 6,000 per month to P 15,000 to P 30,000 per month within ten years.

Restaurant giant Jollibee Foods Corporation (JFC), which is composed of Jollibee, Greenwich, Chowking, Red Ribbon, Mang Inasal and Burger King in the Philippines has adopted inclusive business in its practices. Under the company’s Farmer Entrepreneurship Program, implemented by Jollibee Group Foundation smallholder farmers are trained to become agroentrepreneurs, gain skills in strengthening their farmer groups, get better access to credit, and linked to the supply chain of JFC.

Since the launch of FEP in 2008, JFC has worked with various partners to train more than 1,800 farmers on agroentrepreneurship. Among them, eleven farmer groups from six provinces in Luzon and Visayas have been regularly supplying JFC. Over the years, these groups have delivered over 3,000 metric tons of various vegetables to JFC including white onions, salad tomatoes, hot peppers, green bell peppers and Philippine lemon. From 2014 to 2016, sales from the total deliveries of FEP farmers amounted to more than P115 million.

Two other inclusive businesses that actively partner with farmers is Kape’t Buhay (Coffee and Life) by Bote Central Inc. and Nestlé’s Nescafé brand.

Kape’t Buhay has invested P10 million in various forms of capital to help establish at least 26 community-based enterprises—all of them owned and managed by organized clusters of coffee farmers. Inspiring farmers with its “soil-to-cup” business model, this program has been able to transform coffee growers into viable and even successful entrepreneurs.

Through a patented coffee roasting machine, developed by Bote Central’s owner, specifically designed for this venture, Kape’t Buhay has empowered farmers to break down economic barriers and become their own roasters, distributors, retailers, and even baristas. As the income from coffee beans increases by 100% when it become roasted coffee—and even up to 1,000% when it gets sold in retail per cup—the most enterprising of Kape’t Buhay’s farming partners stand to earn from P300 to P6,000 per kilo of coffee beans that they produce.

Working along parallel lines, Nestlé Philippines’ NESCAFÉ Plan, also shares best practices and sustainability standards to help local coffee farmers achieve steady and reliable supplies, gain quick access to buying stations, and ultimately get paid at world-market rates within eight banking hours.
Fernando Cantos, a member of the Pinagdanlayan Farmers Association Inc. (PFAI) in Dolores, Quezon, earns merely 10 – 12 pesos (P) a kilo from the coffee beans he harvested. His income is exceedingly low and is not sufficient for his family’s daily needs. Even if he wanted to increase his crop’s buying price, he could not. He lacks the capital to have the raw coffee beans become processed coffee beans. However, when PFAI becomes one of the twenty-six partner beneficiaries of the Kape’t Buhay program, Fernando Cantos becomes “a farmer entrepreneur.”

Kape’t Buhay, one of Bote Central’s initiatives, is a social enterprise “focused on using fair trade practices in the production of local coffee.” It aims to empower average coffee farmers, women, and youth to become entrepreneurs in their own rights by providing an enterprise of their own. The model is based on the “from soil to cup” concept which aims to empower the coffee farmers to become active players in the local coffee industry.

The program provides training and technology to coffee farmers. Farmers are educated, trained, and mentored to become farmer entrepreneurs in the agribusiness of coffee. Furthermore, farmers receive coffee roasting machines which allow them to roast these beans right in their own homes. With the machines, they are also able to brew the beans, and sell the cups of coffee to their local communities. From solely being coffee farmers, they can be participants in the whole value chain of coffee production such as distribution, retailing and even becoming baristas. Kape’t Buhay has given them a new means of livelihood and has provided them the opportunity to become more empowered in managing poverty (SDG 1). With this new business model, Fernando Cantos can expect to earn an income of 230 pesos (P) per kilo for a pack of roasted coffee and 700 pesos (P) if he brews his own coffee.
CREATING ECONOMIC CENTERS IN REMOTE COMMUNITIES

The ability of inclusive businesses to inspire economic growth in even the most remote communities is evident in the work of companies as varied as El Nido Resorts and Coffee for Peace.

El Nido Resorts, a cluster of upscale, exclusive resorts in Northern Palawan, has partnered with the low-income small-island communities in the vicinity of its resorts. Coffee for Peace, on the other hand, is a social enterprise using a unique coffee business approach to resolve conflicts and create livelihood streams for a mountain tribe in Mindanao.

El Nido Resorts, operating under the official corporate name Ten Knots Development Corporation, is an eco-tourism company that operates high-end resorts in El Nido and Taytay—two pristine but remote countryside locations that is also home to small low-income communities.

Alongside the company’s biodiversity protection drives, Ten Knots runs a complementary local sourcing program to build the entrepreneurial capacities of its immediate community. The company’s ultimate aim is to achieve maximum profits by placing the highest values on its natural wealth and host communities. The company has a director of sustainability, a key management position, to oversee and manage this approach.

Organic produce grown by its neighbor communities now comprise 60% of the resorts’ total kitchen purchases, with organic-fed pigs making up to 90% of its total supply of pork. The company also provides training for aspiring women entrepreneurs so they can produce some of the accessories and complimentary accessories needed by the resort.

Coffee for Peace is also using entrepreneurship as leverage to improve the economic conditions of Visayan migrants, such as the Bagobo-Tagabawa. This tribe has traditionally lived in upland communities in Mt. Apo, until logging operations in the 1960s forced them to live in conflict with the lowland logging settlements. Both the tribe and the lowland community have suffered from poor economic prospects and a prolonged period of dispute resulting in instances of violence.

By establishing a coffee mill and paving the way for both communities to pursue their own coffee business as one cooperative, the company has managed to create job opportunities while simultaneously solving long-running conflicts.
CONNECTING MICRO-ENTREPRENEURS TO WIDER MARKETS

Integrating even the smallest businesses and home-based enterprises into the supply chain of large companies can achieve two sustainability business targets. One is to cut down on distributorship costs and increase profits, and the second is to create gainful livelihood for individuals and groups who have limited employment prospects.

Smart’s Ka-Partner retailer program, a loyalty and incentive program for Smart cellphone load retailers, is simultaneously achieving both targets in one program. Package costs enable retailers to earn about 4.5% of the cost for prepaid loading services (e.g. for a P100 load, retailers will earn P4.5). Aside from the profits earned by each retailer, the program enables them to upgrade their small business ventures and even gives them chances to win cash prizes.

EXTENDING THE BENEFICIAL IMPACTS OF INFRASTRUCTURE AND TECHNOLOGY FOR MORE PEOPLE

In terms of global performance and ranking of overall infrastructure quality, the Philippines still lags behind the five pioneer members of the Association of Southeast Asian Nations (ASEAN). This has prodded the government to significantly improve the country’s infrastructure. However, actual infrastructure spending, particularly between 2012 and 2014, fell short of the government’s targets.

In support of the government’s thrust to spread economic activity and opportunities to the rest of the country, companies like Cebu Holdings Inc. are driving in shareholder gains through large-scale infrastructure developments in provincial capitals and hubs. With the support of the Cebu government, CHI has poured in over P55 billion in land and infrastructure investments to continue to grow and expand Cebu Business Park and Cebu I.T. Park—now two of the leading economic hubs in the south operating under a special economic zone status.

Aside from creating the space for commercial growth, CHI constantly looks for ways to create markets that can further ignite the entrepreneurial spirit of small businesses. For instance, Cebu I.T. Park has opted to use a strategically located vacant lot into an incubation space for micro and small enterprises while the property is still being primed for permanent use. Now called Garden Bloc, CHI attracts the best small business concepts in the province by offering the use of topnotch commercial spaces at much lower rates.
ICT SUPPORT FOR BUSINESSES

Using existing ICT infrastructure, businesses can also support economic growth by harnessing the power of digital technology to reach previously unconnected communities. This is the core business strategy of ventures such as GCash, Globe MyBusiness, Globe Business, and Freenet.

Globe myBusiness maximizes the potential of micro, small and medium enterprises (MSMEs) so they can take their passion for business onwards and upwards to achieve success. Offering customizable business solutions designed to fit their needs, Globe myBusiness empowers Filipino MSMEs to embrace the digital shift, giving them the competitive advantage to improve efficiency and productivity, reduce cost, and further grow their business, allowing them to create their own stories of success.

Unbanked and underserved sectors in the Philippines can now partake of economic growth without going through formal banking channels through Mynt, a wholly-owned financial services company of Globe. Mynt has so far over three million customers doing P4 billion transaction value per month serviced through a network of more than 12,000 partner outlets. Its subsidiary G-Xchange operates GCash, a mobile money service that taps into the wide customer base of Globe. Moreover, Mynt has recently started its own lending company under the name Fuse, and has disbursed approximately 4,000 loans to 3,000 borrowers in the last quarter of 2016.

Globe Business, the enterprise information and communications technology (ICT) arm of Globe, is leading the way in encouraging local government units like Makati City to adopt the integration of ICT in governance as a means of improving the delivery of government services and exchange of information. In May 2017, Globe and the City of Makati launched the Makatizen Card which will enable the city’s 500,000 residents to transact with and avail the services of the city government. They can also use their cards to pay fees and taxes, as well as for personal remittances and other financial transactions. City government employees, on the other hand, can use their Makatizen Card to receive salaries and allowances. The Makatizen Card also functions as an Automated Teller Machine (ATM) Card and is a valid government ID. This initiative supports Globe’s drive to transform the Philippines into a digital nation by instilling the importance of eGovernance to offices ranging from the local government units up to the national government.

Working along parallel lines is Voyager Innovations’ Freenet, which connects small enterprises to application developers who can create digital tools and other technological solutions to help small businesses flourish. Freenet also allows small businesses to make their websites and mobile applications accessible to data users for free, thereby enlarging the reach and market of their products and services. Today, there are already 70 brands using the Freenet platform. This number is expected to continue growing in the next years as more small businesses realize the need to modernize their marketing and communication channels.

Gaps and Opportunities

While efforts have been made to include the base of the pyramid (BOP) segment of the population, economic value generated still has not significantly benefited the BOP. Economic activities at the base of the pyramid must be activated through innovative private sector models, such as increasing manufacturing industry, providing access to financial services, creating an ecosystem of comprehensive solution that will boost the capability of productivity of small-holder farmers.
With P45 as starting capital, Manuel Iwayan built his green business recycling and upcycling old rubber tires. He was recognized by Citi Microentrepreneurship Awards as special winner for the sustainable business category in 2016.
In spite of the continued growth of markets and economies, marked disparities in income continue to exist with the richest 10% earning up to 40% of the world’s total income.

Considering the fast growth of populations in developing countries, this discrepancy can go up by another 11%, further compounding the situation of people who already make do with low salaries for the same jobs others do at higher rates.

Inequities in income is anathema to economic growth and perpetuates not only poverty but also conflict and unrest. It is therefore in the best interest of business to propose solutions that usher in equitable wealth distribution and greater financial inclusivity for communities living in the base of the pyramid.

Such solutions may include improving the regulation and monitoring of financial markets and institutions, and creating new business models that focus on inclusion, learning, and better access to credit as a core strategy. Facilitating the safe migration and mobility of people is also key to bridging the income divide.4

SDG Targets Being Addressed

4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services.

8.10 Strengthen the capacity of domestic financial institutions to encourage and to expand access to banking, insurance, and financial services for all.

10.2 By 2030, empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

10.c By 2030, reduce to less than 3% the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5%.
The small business sector is a key driver of economic growth, and yet many small-business owners still find it difficult to access formal credit and other banking services.

The Magna Carta for Micro, Small, and Medium Enterprises (MSMEs), a law passed by the Philippine Congress, mandates banks to allocate at least 8% of their loan portfolio for small businesses, and at least 2% for medium enterprises. Only rural banks, however, consistently complied with the 8% requirement. Compliance for universal and commercial banks was below the required rate and declined over a stipulated period. Thrift banks were likewise unable to sustain their ability to meet these targets.

Directly addressing this roadblock in private financing are some of the country’s leading banks, who are finding alternative ways not only to provide access to loans but also to strengthen the abilities of small enterprises to compete in today’s highly technological field.

BPI Foundation’s BPI Sinag is a platform that promotes and advances social enterprises through coaching, mentoring, and providing access to finance.

This annual search for the best social enterprise business models recognizes social enterprises as catalysts for societal innovation and inclusive growth. BPI Sinag targets to capacitate and scale-up enterprises that create solutions to a variety of social problems through new ideas and seek meaningful impact for their partner communities.

For its part, UnionBank of the Philippines (UnionBank) came up with an innovative solution that helps women or “nanays” who run “sari-sari” or small home-based stores in far-flung areas that have little or no access to banks. Through the help of microfinance institutions such as Tulay sa Pag-Unlad, Inc. (TSPI)—these “nanays” are given access to

Private Sector Initiatives towards
FINANCIAL INCLUSION

Private Sector Initiatives
of 9 Reporting Companies on Financial Inclusion, per initiative category

- Microfinance for MSMEs
- Financial Literacy
- Remittance Centers (OFWs)

PRIVATE FINANCING FOR SMALL BUSINESSES

The small business sector is a key driver of economic growth, and yet many small-business owners still find it difficult to access formal credit and other banking services.

2% of bank’s loan portfolio are allocated for medium enterprises
8% of bank’s loan portfolio are allocated for small businesses

The Magna Carta for Micro, Small, and Medium Enterprises (MSMEs), a law passed by the Philippine Congress, mandates banks to allocate at least 8% of their loan portfolio for small businesses, and at least 2% for medium enterprises. Only rural banks, however, consistently complied with the 8% requirement. Compliance for universal and commercial banks was below the required rate and declined over a stipulated period. Thrift banks were likewise unable to sustain their ability to meet these targets.

Directly addressing this roadblock in private financing are some of the country’s leading banks, who are finding alternative ways not only to provide access to loans but also to strengthen the abilities of small enterprises to compete in today’s highly technological field.

BPI Foundation’s BPI Sinag is a platform that promotes and advances social enterprises through coaching, mentoring, and providing access to finance.

This annual search for the best social enterprise business models recognizes social enterprises as catalysts for societal innovation and inclusive growth. BPI Sinag targets to capacitate and scale-up enterprises that create solutions to a variety of social problems through new ideas and seek meaningful impact for their partner communities.

For its part, UnionBank of the Philippines (UnionBank) came up with an innovative solution that helps women or “nanays” who run “sari-sari” or small home-based stores in far-flung areas that have little or no access to banks. Through the help of microfinance institutions such as Tulay sa Pag-Unlad, Inc. (TSPI)—these “nanays” are given access to

MMCMC has processed over 9 million transactions worth P19 billion
loans to help their businesses. However, they still need to travel far to pay their amortizations which exposes them to certain pain points such as the cost of traveling, risk of holding cash, and the need to close shop for a day.

UnionBank, in partnership with Globe’s GCash mobile money platform, developed the Mobile Money Cash Management (MMCM) which enabled TSPI with a collection and disbursement service for the 300,000 “nanays” all over the country. This digital platform has now successfully processed over 9 million real-time transactions worth P19 billion.

Through MMCM, TSPI reduced its reconciliation turnaround time from fourteen days to one day. And for the “nanays”, they now have a more convenient channel for receiving and repaying their loans; leading to the improvement of their living standards.

Among foreign banks, Citi as the largest in the Philippines, has extended strong and consistent support for financial inclusion. Since 2002, the Citi Microentrepreneurship Awards (CMA) sweep the country for outstanding micro business owners that escaped poverty and brought prosperity to their communities. The winners are showcased in national events and community town halls to inspire more to become micro economic heroes. Seeking to address knowledge and skills gaps among micro business owners, even with winners of CMA, the Citi Microenterprise Development Center was established to offer short management courses, skills training, networking opportunities, and various incentives to inspire the growth of more microenterprises.

Working with various non-profit partners, Citi also invested in designing a One-Stop System for Growing Microentrepreneurs, which served as blueprint for today’s Negosyo Centers, and research studies including the Sustainable Growth for Marginal and Small Farmers Program, to identify high-potential value chains and new business models that subsistence farmers can pursue to succeed in the agricultural industry.

100 Farmers Citibank helped to gain access to formal and long-term financing and develop more agricultural businesses

26 Microenterprises and 340 indirect beneficiaries helped by Citibank’s OSS
LENDING BY NON-BANKING INSTITUTIONS

Technological innovations and creative business approaches have also made it possible for a new breed of companies to participate in financial inclusion for MSMEs. PaidUp and Cebuana Lhuiller, two non-banking companies, are proving that empowering marginalized groups through strategic loan and crowdfunding services can be a lucrative venture. They also show the ability of technology to overcome developmental obstacles.

Cebuana Lhuiller, for instance, has been able to parlay the success of its pawnshop business into more sustainable credit services. Cebuana Lhuiller, through its financing company arm, Cebuana Lhuiller Financing Corp., now extends small loans to individuals and groups with limited to zero access to formal credit through its Lucky Loans (for MSMEs) and Happy Loans (for individuals). These are able to create value for poor communities by offering a simplified application process, easy terms, and fewer requirements. The company’s huge network of 2,000 pawnshop outlets complemented by an online application scheme, act as financing agents, to make these programs easier to access and more appealing to its target market.

PaidUp is another non-banking venture that offers innovative financial and marketing services to small enterprises. This mobile phone app allows its partner stores to crowdfund or solicit investments directly from their “top fans” or loyal customers. In return, they enjoy special discounts and offers from their favorite stores. This innovative marketing and investment platform enables small stores to bypass banks while creating ways for entrepreneurs to touch base directly with their clients in new inventive ways.

According to the online publication Fintechnews Singapore, Paidup is a “Filipino startup [that] seeks to reinvent how we order and pay for food and beverages.” It is the first pre-pay mobile wallet app in the Philippines with over a hundred merchant partners and thousands of users. It has processed over P1.5 million (USD30,000) worth of transactions so far by allowing customers to order food, drinks, and other services on-the-go, and without having to wait in lines or settle bills at checkout.
The Philippines is one of the top recipient countries for overseas remittances, next only to India and China. Yearly, more than 10 million Filipinos overseas send around USD 26 billion to their families in the Philippines, accounting for around 10% of our country’s Gross Domestic Product (GDP). Remittances are thus a vital source of income for many Filipinos, some of whom depend solely on this income stream for their daily sustenance. In times of calamities and emergencies, remittances also often serve as the only recourse and lifeline for some households.

As a testament to the power of entrepreneurship to create developmental solutions, more Filipino brands are now directly addressing the high rates levied by banks for remitting money. By creating new business models that drastically reduce money transfer costs, a large number of Filipino families are now able to stretch the value of remittances they receive from their relatives.

Palawan Pawnshop Services runs a remittance service called Pera Padala (literally “send money”), with no required minimum remittance amount, a simplified sending process, and a minimum service charge of only P2.00 (USD0.04). The company now covers neighboring countries in Southeast Asia, including Australia, the UK and Canada. Cebuana Lhuillier provides another avenue for remitting money to and within the Philippines. With more than 2,000 branches nationwide and many accredited international partners, this money transfer service offers real-time transactions and an appointment-system innovation, which enables clients to set an appointment before visiting a branch. These features considerably cut down the time customers previously spent waiting in line and filling in forms.

Another company and a new player in this growing space is Ayannah, the group behind Sendah Direct and Sendah Remit. Sendah allows the inter-operability of remittance centers and other related smaller entities using the company’s money-transfer software and web-based platform. With this innovation, recipients are now free to collect cash remittances from the nearest possible entity that has available cash, so long as they are part of the Sendah network. This enables smaller or upcoming businesses to cash in on the lucrative remittance business. According to the company, Sendah aims to further bring down remittance transaction rates by increasing the number of players in this field and the overall liquidity available within its network. Ultimately, the goal of the company is to become the biggest inter-operable agent-based digital transaction network in the Philippines.
Financial Literacy

According to a Standard & Poor’s Ratings Services survey, the Philippines is one of the 30 least financially literate out of 143 countries. This translates to only 25% of Filipino adults who understand the basics of managing money.

Improving the ability of more Filipinos to gain a better understanding on investments, spending, and money management can significantly improve local economies. It can lift entire communities out of poverty and can result into happier and healthier families in the long term.

Financial literacy enables stakeholders to make rational decisions and manage funds. Using the 50.8% gross savings-GDP average of the Philippines from 2005 to 2015 as a benchmark, a 10% improvement in the efficiency of financial management alone could boost the country’s GDP growth by 5 percentage points.7

Finance Education

With an aim to produce topnotch financial professionals while centralizing support for finance education in the Philippines, the founders of the Financial Education Center or FEdCenter has invested an estimated P5 million annually over the past few years. The FEdCenter is a network of 136 schools (as of 2016) covering around 20,000 to 30,000 students and educators. It also advances financial literacy and learning through programs such as the National Finance Summit, National Finance Competition, National Finance Education Week, and the Financial Literacy Caravan, which travel to various universities across the country. Aside from these programs, the Center highlights financial sustainability as a cornerstone of finance education.

Outside formal schooling initiatives, other companies such as Philam Life and General Insurance are stepping up efforts to improve the financial literacy numbers in the country. The company is doing so by inculcating the value of financial literacy among children while they are still in their formative years. This program, called Philam SAVES or Savings Awareness and Values Education Sessions, equips school children with the right skills and information to see them through better financial decisions as they grow up.

Since 2006, the finance academe network expanded to 136 schools

In 2015, Philam SAVES held 20 sessions, teaching more than 1,000 school children
Gaps and Opportunities

As in most areas of entrepreneurship, partnerships and collaboration are essential to advance financial inclusion models. With the unprecedented growth in the use of technology among lower-income markets, more companies can establish synergies and pursue new schemes to break barriers to learning as well as access to credit and other funding streams.

Both commercial and rural banks, for instance, can work with telecommunication providers to roll out digital banking mechanisms for the unbanked in the countryside. New loan and credit providers can also enlist the support of retailers with numerous branches to further facilitate ease of payment for those living in distant municipalities.

The role of the government in this area is also vital. For instance, the government has the power to regulate financial institutions to protect consumers from scams and schemes that capitalize on low levels of financial literacy. The government can compile relevant data of micro-credit providers to both protect and enhance this crucial lending space in the future. It can also integrate financial literacy in our basic education curriculum starting at the elementary level.

In addition, private enterprises can explore new business concepts that can generate profit by providing other forms of financial services in rural markets. Companies, for instance, can work on addressing distrust some rural communities have on credit and digital platforms. This will lay down the foundation for these communities to transition from relying solely on cash into a more expandable online mode of finance.

These initiatives can further support the National Strategy for Financial Inclusion which envisions a wide range of financial products and services that serve a range of market segments, effective interface of bank and non-bank products, and use of technology to reach the financially excluded, among others.8
SDGS on the Environment

Energy Development Corporation’s BINHI Reforestation Site in Mt. Apo Geothermal Project
The quality of human life is inextricably linked to the quality of its natural environment. Where rivers exist, communities and industries are born. Where forests flourish, food, and medicine abound. Any grave threat to the environment should therefore be seen as a threat to our very survival.

According to UNDP, more than 40% of people around the world are now affected by water scarcity. This is projected to increase with the rise of global temperatures as a result of climate change. Further, greenhouse gas emissions continue to rise, and are now more than 50 percent higher than their 1990 level.

Businesses and the fast pace of commercial progress are often blamed for many of these environmental challenges. But just as our industries may negatively impact the planet, it is also the same industry that can provide the best and most innovative solutions to these problems.

The restoration of water ecosystems, for instance, including the efficient management of resources, and the reduction of waste and pollutants—all these challenges are now being addressed by the private sector and have even become integral business targets for some companies.

As evident in the business case studies and stories in the section—achieving some SDGs on the environment has become part and parcel of the cost and profit strategies of many Philippine businesses today.
Through Agbayay Para sa Kalikupan (Partnership for the Environment), CHI invested in a garbage truck and provided a monthly fuel subsidy and protective equipment for the health and safety of its community partners living beside CHI's flagship estates.

**Private Sector Initiatives**
on Responsible Consumption and Production of 13 Reporting Companies, per Category, %

- Green Procurement 18%
- Solid Waste Management 6%
- Special Waste 6%
- Water Efficiency/Conservation 23%
- Sustainable Packaging 18%
- Sustainable Production 29%
- Total Initiatives 17
- Total Disclosed P200.6M

Cebu Holdings, Inc.
While economic growth is key to the development of society, it also brings with it immense pressure on natural resources and ecosystems.

With their access to substantial resources for investments and operations, business leaders now have a cost imperative and a moral obligation to use their financial resources even more wisely to improve the physical environment where their businesses operate. More importantly the private sector is beginning to recognize and internalize the value of natural capital and the risks and opportunities associated with it.

One heartening development in the Philippine business sector’s efforts to make substantial contributions to environmental goals is the Philippine business’ response to climate change in a document submitted to the Climate Change Commission Philippines in support of the Paris Agreement.

Dubbed the Manila Declaration 2015, the document was signed by 60 key players in the private sector and embodies their call for every country to take measures in reducing carbon emission, ensuring that global cumulative emissions do not exceed one trillion tonnes, and keeping the global average temperature increase below 2°C.

This is one concrete example of how business can contribute significantly to the achievement of the SDGs. By breaking the business as usual mindset and pioneering bolder and brighter solutions, the private sector demonstrates how they value natural capital.

**Manila Declaration 2015 was signed by 60 key players in the private sector to take measures in carbon emissions reduction**

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**SDG Targets Being Addressed**

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

12.7 Promote public procurement practices that are sustainable in accordance with national policies and priorities.
More and more, businesses are realizing there are better ways to manage and maximize financial and environmental resources. Today, some of our brightest enterprises are using their business expertise and insight not only to benefit their shareholders but also to improve the physical surroundings that allow them to achieve more.

FROM TRASH TO TREASURE

Having undergone major expansion within the last 10 years, Cebu Holdings, Inc. (CHI) recognizes the need to address the increasing solid waste of Ayala Center Cebu. For this, CHI tapped a local and low-income partner, Barangay Luz, to provide waste collection services instead of engaging a professional hauling company.

Through its Agbayay Para sa Kalikupan (Partnership for the Environment), CHI invested in a garbage truck and provided a monthly fuel subsidy and protective equipment for the health and safety of its community partners living beside CHI’s flagship estates.

Other than direct income from the waste management activities, the program also provides additional livelihood through upcycling. Recyclable materials from the waste disposed by Ayala Center Cebu become raw material for products developed and sold by women in the barangay. These have provided solid earnings for Barangay Luz of about P13.6 million since 2008, while providing Ayala Center Cebu a sustainable solid waste management program model that bridges solid waste management with entrepreneurship, and CSR with inclusive development.

Another program that gives financial value to trash is Starbucks’ “Grounds for your Garden.” Introduced in 1995, this composting project provides customers the opportunity to fertilize their gardens with complimentary bags of coffee grounds. This means less money spent for disposal by the company, as well as savings for clients who previously had to pay for soil bags for their gardening needs. And where commercial composting is available, many Starbucks stores are now also able to divert their remaining coffee grounds and food waste away from landfills.

P1.92 million
earned by the Solid Waste Management Team of Brgy. Luz for 2016 from recyclables collected, upcycled and sold
The majority of the most commonly found pieces of garbage in the country today are plastic items. This fact is not lost on Unilever, which sells products contained in around six billion sachets per year, or around 6,000 tonnes of plastic. To prevent these from ending up in landfills or clogging waterways, Unilever Philippines developed a sustainable and replicable model for plastic collection and upcycling. This is Project Sweep.

The project employs barangay street sweepers, who in their spare time, would go around neighborhoods to collect flexible plastic from homes. This reduces the amount of plastic that ends up in landfills, and also provides extra livelihood for the sweepers who receive Unilever products in exchange for their efforts.

The formula is simple, but already, it has recovered about 80,000 kg of plastic. Moreover, a waste analysis study done in Baseco (an informal settlement in Manila) revealed that 20% of the residual waste has been reduced because of Project Sweep. Unilever aims to scale up in 2017 with a tweaked model that will incorporate learning from the project.

Tapping the same partners, Unilever also collects its sachets by integrating sachet collection into product sales using “Superstores” as collection and redemption points wherein each sachet collected. Dubbed Zero Waste to Nature, Unilever has collected about 100 million sachets from 2013 to 2016. Unilever is looking at implementing the program fully in communities near the Pasig River by 2020; in the entire Metro Manila by 2025; and nationwide by 2050.

Another multinational giant, Proctor & Gamble, in partnership with the Asian Development Bank (ADB), sought to achieve its Long Term Sustainability Vision and 2020 Goals of having zero consumer or manufacturing waste go to landfills. P&G’s Waste to Worth (W2W) project conducted pilot studies on the feasibility of building an integrated solid waste management facility for developing countries like the Philippines. The feasibility studies then formed the basis for two proposed pilot projects to convert solid waste to energy.

To date, the first W2W facility in the Philippines will be established in Angeles City, Pampanga with the formal signing of a joint venture agreement (JVA) between Angeles City and Sure Global Waste to Worth Innovations. The city government expects to mitigate at least 230 tonnes of municipal solid waste per day and to generate 10 megawatts of power.

The first W2W facility in the Philippines will be established in Angeles City, Pampanga.

The city government expects to mitigate at least 230 tons of municipal solid waste per day and to generate 10 megawatts of power.

100 million sachets were collected by Unilever from 2013 to 2016 as part of Zero Waste to Nature

80,000 kg of plastic recovered by Unilever Philippines’ Project Sweep
E-WASTE AND HAZARDOUS TRASH

Project 1 Phone, the electronic waste (e-waste) recycling program of Globe Telecom, rolled out in 2014, collects e-waste from various corporate operations and customers, and then transports them to their accredited partner Total Environment Solutions Asset Material Management (TES-AMM) in the Philippines. The waste is then shipped to TESAMM Singapore for recycling and continued processing.

With corporate partners Huawei, Aboitiz, Coca-Cola, US Embassy, Unionbank, and Nestlé Philippines among others, Globe has managed to collect e-waste in 2015 amounting to 124,572.19 kg—up by 56% compared to 2014’s 79,968.20 kg. The 2015 proceeds from Project 1 Phone were used to build 46 classrooms in various public schools across the country while the 2016 proceeds coming from the total 141,833.69 kg of e-waste collected helped build ICT classrooms and bring 21st-century learning to 142 schools, 6,300 teachers, students, and 162,646 teachers students nationwide.

Similarly, PLDT Inc., has adopted proper waste segregation practices across its business units through its Balik-Baterya (Battery Return) Program. PLDT partnered with government agencies Environment Management Bureau (EMB) and the Department of Environment and Natural Resources (DENR) in developing staging hubs. With such procedures in place, PLDT has reduced its impact on the environment and provided a clean and safe workplace for its employees. PLDT has 10 designated waste-staging facilities from where the accredited transporters will pick up the hazardous waste. PLDT also partnered with PBSP and Motolite on the program.

Since 2007, PLDT has collected 2,980 tonnes of used lead-acid batteries (ULABs) amounting to P70 million, which support various CSR programs that, in turn, also produced its own earnings of P7.81 million.

Over the last 10 years (from 2007-2016), some P99.8 million worth of proceeds have been raised from 4,000 tons of ULABs that were collected from 180 donor companies. These results also facilitated social impact in terms of support to health programs and public schools, as well as the creation of learning centers.
Some Philippine companies are now paving the way toward efficient water use through better technologies and improved processes. For instance, Sunlight Foods Corp. (SFC) implemented several innovative water conservation initiatives that resulted in the drastic reduction of water consumption from 18 liters per kilogram output (L/kg) to 3 L/kg. This includes installation of a condensate recovery system, water recycling, use of auto-faucets for hand-washing, and innovative procedures for cleaning their raw materials, processing equipment and facilities that effectively separate solid waste from waste water thus reducing the waste water generation to barest minimum of 0.6 to 0.8 cubic meter/day. SFC also designed and installed its own wastewater treatment facility, a small foot print WWT tailor-fit to its waste water generated and utilizes the Biological Augmentation technology the treated waste water was recycled for use in the company processing facility’s toilets.

These and other improvements in water metrics have resulted in savings of P339,300 in 2010 for 580,000 kg of product produced and was sustained up to present.

The cumulative effect on SFC is that its sustainable operations contributed to its profitability and also provided a source of funding for its CSR programs. These initiatives were also shared with other business entrepreneurs, national and local government agencies, and the academe for replication and greater impact. SFC partnered with the Department of Science and Technology on Cleaner Production Techniques trainings the Employers’ Confederation of the Philippines on Big Enterprise – Small Enterprise Productivity Improvement Program, the Department of Trade and Industry-Center for Industrial Competitiveness for productivity improvement trainings-program and the Unilever Selecta Ice Cream for Unilever Sustainable Agriculture practices in farming its raw materials the sustainable way.

For its part, Mondelez Philippines installed in 2012 a unique reverse osmosis and ultraviolet light water treatment facility, which led to the heightened use of recycled water and reduced use of fresh water in its systems. In the following year, the company installed a biomass boiler, allowing renewable and biodegradable sources of energy like rice and coconut husks to power the company’s plants. Mondelez saved enough water to fill 14.5 Olympic-sized swimming pools. It likewise saved energy equivalent to the amount needed to light and run Mondelez Philippines for 4.3 months. Notably, the company also prevented carbon emissions equivalent to 137 airplane round trips from Manila to Australia.
NEW TECHNOLOGY TO TREAT WASTEWATER

With Cebu I.T. Park’s increasing number of new developments, the volume of wastewater it generates has significantly increased. To ensure the compliant quality of effluent discharge, owner CHI and subsidiary Cebu Property Ventures and Development Corporation (CPVDC) began the construction in 2015 of a mechanized treatment facility using the Sequence Batch Reactor (SBR) Technology.

An SBR is an activated sludge system that works based on sequential stages of treatment. It is programed by time rather than space as would a conventional activated sludge system. With SBR, wastewater will first pass through the Anaerobic Baffled Reactor (ABR), thereby separating oil, grease, and grit from the stream.

The P200 million-investment started in August 2015 and covers a five million liters per day (MLD) flow capacity. The first SBR was scheduled for completion in 2016, while another 5-MLD flow capacity (Phase 2) SBR is set for 2017, requiring another P200 million in investment.

The system ensures compliant quality of effluent discharge and helps prevent pollution in waste water systems. It contributes to SDG 6, clean water and sanitation, particularly on wastewater treatment as very few integrated, master-planned and mixed-use communities have their own centralized sewage treatment facilities.

Makati Development Corporation (MDC) was the general contractor for the project while Manila Water Total Solutions conducted the study on the wastewater treatment requirements of the Cebu IT Park.

WATER PRINCIPLES IN ACTION

Nestlé Philippines grows millions of coffee plantlets every year at its five seedling centers: in Lipa, Bukidnon, Quirino, Davao del Norte and South Cotabato.

During farmer training, the Company imparts knowledge to farmers to conserve water through the use of plastic as mulch and coverings to retain soil moisture; contour farming to prevent water run-off and reduce soil erosion; planting of crops in between rows to conserve soil moisture and maximize land productivity; water impounding ponds to catch rain water; check dams to reduce water and soil run-off; and water meters and sprinklers to control the release of water.

The 337 billion liters of water were returned to the environment from replenishment and treated wastewater projects by Coca-Cola FEMSA.

In addition, farmers are trained at the seedling centers on the best available coffee farming technologies, including ways to more efficiently use the water their crops. Nestlé’s continues to develop water conservation practices for its own operations and that of the farmers.

Within its manufacturing sites, Nestlé has put in place rainwater harvesting systems, technologies to reuse and recycle water, and waste water treatment plants. Two of Nestlé factories are zero waste to discharge factories. Despite increase in production, water intensity or the volume of water withdrawn over the metric tons of product manufactured, was maintained. Water intensity was 6.56 cubic meter per metric tonnes of product in 2015 and 6.62 cubic meter per metric tonnes of product in 2016.

Coca-Cola FEMSA Philippines Inc., Coca-Cola Company’s licensed bottling partner, also aims to reduce consumption and implement processes that ensure efficient water use by reducing water usage ratio per every liter of beverage product. From a global water use ratio of 2.62 liters, Coca-Cola in the Philippines is now at an average of 2.2 liters of water use per every liter of beverage product.

In 2016 alone, an investment of over USD 4 million paved way to top-of-the-line waste water treatment facilities in various Coca-Cola manufacturing plants in the country. These facilities will help optimize the use of water, the re-use water resources, and the return to the environment, cleaner that its original state.
Over the years, Starbucks has launched several initiatives to decrease the environmental impact of its disposable cups. It has developed recyclable cup solutions and employed marketing and product development strategies to increase the use of personal reusable cups by regular clients.

In addition, Starbucks uses recycled-content cup sleeves, hot beverage paper cups with 10% post-consumer recycled fiber, and new plastic cups with less environmental impact than their previous plastic cups. Customers who drink their beverages in the store are also encouraged to use a ceramic mug.

With better paper products and consumers engaged in sustainability action, Starbucks ensures less waste and a higher recycling rate. Their partners come from the paper and plastic cup value chain including municipalities, raw material suppliers, cup manufacturers, retail and beverage businesses, recyclers, NGOs, and academic experts.

Similarly, Universal Robina Corporation (URC) uses recyclables for its packaging materials such as PET and Polypropylene. It also incorporates at least 5% of PET regrind during bottle production.

URC reincorporates some byproducts of its manufacturing processes such as candy mass and chocolate trimmings back to the production process in order to minimize wastage. It also uses some by-products of its flour production like bran and pollard into animal feeds.

Griffin’s, a New Zealand brand distributed by URC, separates food waste into high protein, starch, dry product, and wet product. This allows Griffin’s to earn revenue from waste materials and recycle starch into raw material for packaging products. All product waste is moved to farms for stock feed. Griffin’s waste oil is broken down and used as biodiesel. Pallets that are removed from site are broken down and reused in playground construction.
GREEN DEALING AND PURCHASING

Honda Cars Philippines’ (HCPI) Green Purchasing program draws mutual management support and continued collaboration between Honda and its suppliers through an environmental management system. Shared goals to reduce emissions and ensure compliance to chemical guidelines also prods Honda to work closely with its business partners.

By having shared quality assurance rules and recognition for outstanding performance, mandatory EMS for suppliers, regular audit, and training, Honda was able to address quality problems, achieve better use of resource materials, reduce carbon emissions, and ensure compliance to government regulations. This continued quality improvement and lower environmental impact also resulted in cost competitiveness and manpower motivation. Meanwhile, its Green Dealer Program is a monitoring and certification system that guides Honda’s Dealership Network in implementing activities that reduce the environmental impact of its operations. As dealers become aware of their environmental impact and take action to reduce them, they are able to improve their operations, conserve energy and water resources, and provide a safe working environment for their employees. With an actual cost of P750,000 from 2012 to 2016, the program continues to build capability through training, while recognizing outstanding performance and ensuring environmental compliance through audits. It has also helped position Honda’s brand as an environmentally responsible company that produces high quality products.

INFLUENCING THE SUPPLY CHAIN

Launched in 2000, Greening the Supply Chain is an initiative of Nestlé Philippines to promote environmentally friendly practices among the company’s business partners by helping them formulate and implement their own Environmental Management Systems (EMS).

At the core of the program are technical assistance and training programs for all of Nestlé’s business partners. For instance, the company took the lead in mounting seminars and workshops for vendors and suppliers. These introduced them to EMS concepts, as well as better mechanisms for planning, implementation, and audit and review. To date, 240 business partners participate in this program generating the establishment of multiple EMS and environmental programs. This created a multiplier effect that boosted environmental protection throughout Nestlé’s supply chain while realizing significant operational efficiencies and cost savings for more business ventures.

240
Number of business partners to-date who have participated in this program, generating the establishment of multiple EMS and environmental programs
Gaps and Opportunities

While the business sector is seen as doing more of its share to contribute to the achievement of the SDGs, there is still more to be done. For instance, low compliance to the Ecological Solid Waste Management Act leads to limited awareness of communities on waste segregation, recycling, composting.

Although rural areas generate less waste than urban areas, the residents of these areas end up dumping or burning their garbage if left without useful information and means to practice more responsible waste management. To address this, the private sector, especially those active in rural areas, should also target partnerships with host communities or LGUs hosting their facilities.

There is also a system to check compliance of LGUs with the law through the Office of the Ombudsman. But without a more adequate system for rewards and sanctions, non-compliant LGUs or companies may end up canceling out any headway accomplished by those committed to contributing to the SDGs.

There are also plenty of opportunities to scale up the current initiatives narrated in this section. One is by aggregating initiatives within corporation’s business units. CHI’s Agbayay Para sa Kalikupan, to cite one example, can be replicated by Ayala Land in its other subsidiaries and sister companies. Another opportunity is to further develop networks for collaboration. Starbucks can explore new links with nearby MRFs, backyard farms, and schools, among others, to ensure waste diversion and promote heightened reuse. Unilever and P&G and other companies can also partner with the Municipal or City Environment and Natural Resources Office (MENRO/CENRO) in plastic waste collection and with cooperatives (e.g. Bazura Bags) to upcycle the collected materials as material input for their business.

Finally, there is knowledge and technology sharing. Developing venues for exchange ensures best practices are shared and an environment-conscious business culture is encouraged. Knowledge and technology sharing also channel effective participation and collective action, which can lead to more meaningful and impactful contributions, ideas, and innovations.

Scaling up requires direction from top management and collaboration across industries. Being able to move toward this end can also be a good measure for maturity as environmental goals rise to the same level of priority in the business agenda, as competitiveness and growth.
COLLECTIVE CLIMATE ACTION
Climate change threatens the lives of everyone around the world. But its effects are felt most by vulnerable populations like women, children, and the elderly, and by those who live in regions susceptible to drastic changes in the environment. Food and water will become scarcer. People’s livelihoods will be at risk, threatening to negate the gains of poverty alleviation efforts, and in other SDGs, unless immediate collective actions are taken.

Anthropogenic emissions of carbon dioxide (CO₂) and other greenhouse gases continue to rise. These emissions are causing long-lasting changes to our planet’s climate system. Rising average surface temperatures, extreme weather events, changing rainfall patterns, rising sea levels, and increased ocean acidity are all being observed.

According to the 2016 Global Climate Risk Index, the Philippines was one of the nations most affected by extreme weather events from 1995 to 2014. In 2013, the country ranked first when Typhoon Haiyan slammed the archipelago, resulting in 6,000 deaths and over $13 billion in losses.

The Philippines ranked third among 171 countries most at risk of disasters based on the World Risk Report 2016. With no natural land barriers to protect it against climate impact, the country is highly vulnerable to such extreme weather conditions. About 70% of our 1,500 municipalities are located along the coast and are vulnerable to storm surges and rising sea levels. Up to 60% of the total land area is exposed to multiple hazards.

While the Philippines accounts for only 0.4% of global greenhouse gas emissions, this number is expected to rise as the country continues with its recent rapid growth. The energy sector is the biggest contributor to these emissions, followed by agriculture, and to a lesser degree, waste and industrial processes, based on a recent inventory of Philippines greenhouse gas emissions.

The country seeks to limit these emissions as part of its obligations under The Paris Agreement, a landmark accord reached by 196 parties, which aims to limit the impact of climate change through concrete actions. The Agreement was recently ratified by the Philippine President and concurred in by the Senate. The Philippines government has also undertaken several initiatives on climate change, such as the National Greening Program, National Renewable Energy Plan, and the National Climate Change Action Plan for 2011-2018.

Matching these initiatives are innovative programs undertaken by the private sector, which seek to contribute to climate risk preparedness and reduction through technology, and climate risk mitigation through innovative products and energy-efficient business models.

SDG Targets Being Addressed

7.3 Double the global rate of improvement in energy efficiency by 2030.

13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.

13.2 Integrate climate change measures into national policies, strategies and planning.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
In response to the wake of natural disasters that hit the Philippines year after the year, businesses have taken the lead with initiatives that seek to build the adaptive capacity and increase the resilience of communities through advanced technology, information and education, and communication. Having an informed population with sufficient awareness on how to respond before and after a natural disaster happens is key to saving lives.

Every year, the country loses an average of 1,000 lives due to natural disasters. Most deaths are attributed to typhoons, which are naturally occurring at least 20 times per year. Among natural disasters, typhoons are also the leading cause of economic loss, with the economy losing an average of USD151.3 million every year.

The advent of super-typhoons showed significant gaps in the country’s disaster response and management system despite the government’s solid and functioning disaster risk reduction and management structure. Government response was revealed to be mainly slow and reactive. Local government units lacked communication and warning systems thereby weakening mechanisms on evacuation and on search and rescue.

Companies like Shell Philippines Exploration BV, Aboitiz Group, Smart Communications, PLDT Inc., Globe Telecom, and Honda Cars Philippines have come in to fill this gap and assist local governments in building their capability in disaster preparedness. Many of their initiatives, at the same time, also play a role in disaster prevention and mitigation through weather forecasting and early warning systems technology, and in disaster response, rehabilitation and recovery through improved relief and recovery operations in affected areas.

SPEX’S Rescue Project Outcomes

505 trained on Weather 101 and Tropical Cyclone 101

Sector representatives
Teachers
MDRRM officers
Flood/tsunami barangay officials
PCG, Marines

84 participants trained in Basic Life Support in three barangays in Puerto Princesa
WEATHER STATIONS AND MOBILE APPS

All across the globe, weather has become unpredictable as a result of climate change. The amount of rain and snow has changed dramatically. Powerful storms and extreme heat are on the rise. At this point, although we can’t stop a severe weather event from happening, we can minimize the damage that may result from it. Disaster risk reduction in the face of such unusual and erratic weather requires the adoption of measures, such as early warning, that increase preparedness and the ability to respond properly.

This is exactly what SPEX sought to do when it launched Response to Communities under Emergency (RESCUE) in Palawan. The company observed that the province lacked organized groups trained in disaster management including first aid, evacuation, and rescue. The situation is further complicated by the lack of accurate weather information in the region. To resolve this, SPEX took the lead in installing 16 community-based Automated Weather Stations in key municipalities of Palawan. The stations collect weather data that are accessible, relevant, and timely to a lot of people, particularly those involved in agriculture, fisheries, tourism, and energy. The stations also proved useful in educating people about the weather and climate change, and in training them on disaster preparedness. The trainings were undertaken in partnership with local government units, city health offices, coast guard, the police, the education department, transportation bureaus, and peoples organizations in Palawan. To date, more than 500 people learned Weather 101, Tropical Cyclone 101, Basic Life Support, and Rescue and Survival, among others. For these trainings, RESCUE initially targetted communities and schools where Shell operates, but it has since reached out to neighboring barangays and municipalities.

With schools serving as evacuation centers in many instances, RESCUE decided to reach out as well to teachers and their students. A Junior RESCUE program teaches children and the youth to become the company’s partner in safety and security. By making them knowledgeable about fire safety, road safety, first aid, and disaster preparedness, children become less vulnerable in times of emergencies.

For its part, the Aboitiz Group through WeatherPhilippines Foundation uses localized weather information to help the most vulnerable sectors prepare before an extreme weather event happens. Its #WeatherWiser Nation campaign engages businesses, local government units, and technologically savvy Filipinos and educate them on the benefits of a useful, practical, and reliable weather knowledge using its three-pronged strategy of technology, partnerships, and engagement.
To date, it has deployed 800 automated weather stations (target is 1,000 by 2019) across the country. The data gathered from these stations are used to power a free mobile app that Filipinos can use anytime, anywhere in the country. The app’s customizable dashboard provides hourly weather observation and a five-day forecast of the user’s location and his other selected places. Through accurate and localized weather information, the app aids communities and local governments in disaster preparedness and equips first responders with necessary data for disaster response.

The Aboitiz Group through WeatherPhilippines Foundation has deployed 800 automated weather stations across the country.

Given the number of mobile phone users in the Philippines, Smart developed Batingaw, a free mobile app that can assist people by sending geolocated information in times of disasters. Users can send messages or photos, much like in messaging or social networking apps, to provide detailed information on the nature of their emergency and show exactly where assistance is urgently needed. The app also gives practical information on different types of events and what to do in these situations. Users receive disaster alerts, weather advisories, mapping information, and other updates from the National Disaster Risk Reduction and Management Council (NDRRMC), Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA), Department of Social Welfare and Development (DSWD), and Metro Manila Development Authority (MMDA).

Batingaw is available to the public via Android and iOS. So far, the app has been downloaded by more than 13,600 Android users and more than 6,200 iOS users. There is currently more than 12,500 active users of Batingaw. Two of its active users are the Office of Civil Defense (OCD) and NDRRMC which use the app primarily as a communication tool to help reduce, respond, and mitigate the disastrous effects of natural and man-made disasters.
CONTINUITY OF COMMUNICATIONS

Communication networks and infrastructure are typically down whenever a strong typhoon or an extreme natural hazard strikes. Loved ones are unable to update one another and responders encounter difficulty attending to urgent needs due to lack of communication.

To address this problem, Smart Communications created SafePH, an integrated disaster response solution which immediately restores communication by providing mobile satellite services and quickly reactivating damaged cellular networks. PLDT works with other companies in order to come up with interim network solutions. As a result, SafePH served a total of 7,562 typhoon affected families in 2015. Aside from providing free call stations, it also facilitated relief operations for these affected families.

Globe Telecom supported the development of hazard maps for 54 out of 81 Philippine provinces, which will be used by Phivolcs to assist the provinces in their disaster management plans. The company also reinforced Ayala ASSIST, an app that enables Ayala employees to easily seek assistance during disasters. This makes it easier to alert employees in times of emergency, for people managers to account for their employees, and to request for help. One of the mechanisms adopted by Globe is the transmittal of free mobile alerts through SMS, warning customers of potential danger coming from typhoons. As part of its public service program, Globe provides Libreng Tawag, Charging and Internet services during calamities.

7,562
number of families saved by SafePH in 2015

54
number of provinces supported by Globe Telecom in the development of hazard maps
The more the public is prepared for the eventuality of a disaster, the more lives and property are saved. Risks from disasters can be mitigated with knowledge, education, and ingenuity. The application of measures and procedures should rely and be integrated with a thorough assessment of the nature of today’s weather events, the likelihood of disasters and their consequences, and the understanding of vulnerabilities, capabilities, and resources.

A major step in this area of risk assessment is the study by Shell International on how Marikina City can be transformed into a resilient institution able to withstand and respond to various threats. Faced with perennial floods and the prospect of a major earthquake due to the presence of the Marikina Valley Faultline, the study made use of Shell’s Scenarios Process to come up with an action plan for the development of policies and projects that can deal with the twin challenges of urbanisation and climate change. The study was a collaboration among the Marikina City Administration, Metropolitan MMDA, European Chamber of Commerce of the Philippines (ECCP), League of Cities of the Philippines (LCP), Clean Air Asia, Meralco, and OneRenewable.

Meanwhile, Smart Communications provided connectivity solutions to Manila Observatory’s automated weather stations found in Shell gas stations all over the country. This research project called Partnership for Resilience aims to collect weather/climate data for scientific analysis. Smart also organized a series of Regional Communications Summits in partnership with the National Disaster Risk Reduction Management Council in order to promote multi-channel communications in times of calamities.

Honda Cars Philippines invested P5 million in the last five years to educate one million drivers on eco-safe driving. The program seeks to influence driver behavior in relation climate change mitigation, fuel efficiency, clean air, and road safety. It gives drivers practical tips on how proper driving habits and regular vehicle maintenance help keep the car running smoothly and safely while helping to reduce air pollution and CO₂ emissions. If each of the initially targeted one million driver saves half a liter of fuel a day for one year, CO₂ emissions may be reduced to 430,000 tonnes per 180 million liters of fuel saved. To date, around 59,000 drivers have attended the seminars and hands-on training and viewed the eco-safe driving videos. The online awareness campaign in Facebook, Youtube, on the other hand reached more than 2.5 million people.

The Aboitiz Group, through the WeatherPhilippines Foundation, has established 577 strategic partnerships with big conglomerates and non-governmental organizations, and trained 3,324 national agency and local government personnel in 81 provinces including Palawan where it has partnered with Shell Philippines Exploration BV. These trainings are complemented by layman-friendly educational content, accessible through its website weatherph.org, and various social media platforms. Further, WeatherPhilippines partnered with Pilmico Foods Corporation in the production of Weather Wizards, a five-episode animation series. The serialized videos will be used by DepEd to help promote the advocacy among the Filipino youth.

First Gen, EDC and its conglomerate First Philippine Holdings Corporation (FPHC) took a different track to climate research and education. In June 2012, the group established the Oscar M. Lopez Center for Climate Change Adaptation and Disaster Reduction Management Council in order to promote multi-channel communications in times of calamities.
Risk Management Foundation Inc. (OML Center) to catalyze the generation of science-based solutions to climate-related risks and disasters in the country and other developing regions. Aside from climate adaptation and mitigation projects and programs, the Center has developed an interdisciplinary and cross-sectoral network of climate researchers, academics and practitioners in the Philippines and in 9 other countries to enhance the understanding and prediction of climate change and geo-hazard impacts. Its programs consist of: a) awarding research and thesis grants, b) building networks and partnerships, c) fostering capacity building and best practices and d) deployment of enabling solutions. The Center has supported 17 climate researches/grants at a total cost of P 25.8M in these initial years. For 2015 and 2016, it has partnered with the Climate Change Commission to produce the “Philippine Climate Change Assessment Report” to guide government and the public in their decisions.

Climate change is the new normal and businesses will need to adopt bold changes to protect not just public lives and economic gains but also their own investments.

Extreme and unpredictable weather events have a direct impact on production and commerce. In some cases, the catastrophic effects of today’s weather can lead to massive loss of assets and even the complete cessation of business operations. Companies with business operations in countries like the Philippines are particularly vulnerable.

Companies thus have to re-evaluate how their operations impact the environment and undertake steps that can reduce or minimize this impact. An inventory of Philippine greenhouse gas emissions, for example, shows that the energy sector accounts for about 70 million tonnes of CO₂ equivalent, or 55% of the share in greenhouse gases. These emissions from the energy sector are increasing at a rate of 0.6% per year.

Oil remains the country’s major source of energy, accounting for 32.2% of the energy mix, followed by coal at 23.1%. The country’s energy self-sufficiency level is still below the 60% target in 2015. The Department of Energy has accelerated the implementation of energy efficiency and conservation (EEC) initiatives through the accreditation of 15 energy service

Euro-4 vehicles release 50% less harmful air emissions than vehicles with Euro-2 standards

577 strategic partnerships with big conglomerates and non-governmental organizations, and trained 3,324 national agency and local government personnel
companies in March 2016. In 2015, the country saved 5 million tonnes of oil equivalent energy through various EEC programs.

More needs to be done, however, to lessen the country’s dependence on fossil fuels. Strides are being made in transitioning to renewable energy sources. Businesses can also do more by transitioning to a low-carbon pathway. They need to decarbonize their operations and supply chains by setting ambitious emissions reduction targets, improving energy use and efficiency, and by enlarging investments in innovative low-carbon products and services.

Companies like Honda Cars Philippines Inc., Pacific Paint (Boysen) Philippines, Philips Philippines, De La Salle University – Dasmarinas, Cebu Holdings, Inc., Shell Shared Services (Asia), B.V., Nestlé Philippines, Mondelez Philippines, and PLDT, Inc. are demonstrating how this is possible with great imagination and determination. Their initiatives show how switching to green products and green business models may help mitigate the impact of climate change.

GREEN PRODUCTS

Consumers are less likely to think about a product’s impact to climate change whenever they make a purchase. Foremost in every consumer’s mind is how useful the product is and how much it costs. Some companies have chosen to be proactive instead and have now assumed the worry about a product’s ecological impact by introducing green products into the market. Today, the availability of green products helps to make consumers aware about climate change and how their habits and purchases may be contributing to it. These products now empower them to make choices that promote health and the environment.

For example, by introducing Euro-4 vehicles in 2004, Honda Cars Philippines made CO₂ emissions as a factor in deciding which cars to buy. These vehicles release 50% less harmful air emissions compared to vehicles that passed only Euro-2 standards. To date, Honda has sold more than 192,870 units of Euro-4 compliant vehicles. In September 2015, Honda was awarded Euro-4 certification by the Department of Environment and Natural Resource for all of its models, ahead of the government’s January 2018 deadline.

Another green product currently available in the market is the light-emitting diode (LED) bulb by Philips Philippines. This new bulb saves energy by 85% compared to an incandescent bulb and 20% compared to a compact fluorescent lamp. It also reduces a household’s carbon emissions by about 50-70%. Philips created the LED bulb in response to the Department of Energy’s call for energy conservation following the 2015 power crisis. The company estimates that about 50% of bulb users in the country are now using LED.

SWITCHING TO GREEN BULBS

Among the increasing number of users of LED lights are businesses and institutions making a big switch in favor of the environment. They have recognized that using LED helps them to reduce their carbon footprint while making huge savings on electricity expenses.

De La Salle University - Dasmariñas (DLSU-D) is replacing gradually all fluorescent lamps with LED as part of its ongoing Project Carbon Neutral program called “Black Out! Green In!” The program aims to position DLSU-D as a carbon-neutral university by integrating sustainable habits and practices in every section of DLSU-D—instruction, research, operations, and extensions. Aside from investing in LED, the program also includes the installation of solar panels, energy conservation measures such as maximized use of natural light, reducing use of paper, making the university a bike-friendly and pedestrian-friendly zone, planting more than 120,000 native Philippines trees for the
past five years, and having a comprehensive waste management program which includes recycling wastewater and rainwater to reduce dependence on ground water. By investing in carbon-neutral practices, the university made significant savings on annual expenses, generated direct income from sustainable practices, and added value and prestige to DLSU-D. More important, carbon footprint went down from 90,284 tonnes in 2011 to 70,016 tonnes in 2015. Per capita carbon footprint went down from 636 kg in 2011 to 533 kg in 2015. In 2016, DLSU-D was recognized as the greenest university in the Philippines, 10th in Asia and 50th in the world according to the Greenmetric World Ranking of Universities.

Meanwhile, CHI has completed the first phase of its Street Lighting Conversion Program inside the Cebu Business Park and Cebu IT Park. The conversion of street lights from conventional 325 Watt high pressure sodium (HPS) lamps to LED reduced CO2 emissions by an average of 930 kg per month. The move also made savings averaging 12% of monthly consumption, or about P30,000 per month. CHI aims to complete this LED retrofit by 2017.

Shell Shared Services (Asia), B.V. invested P40.6 million in Project Luntian, another initiative which seeks to replace fluorescent lamps with LED. While it appears as a simple office improvement project, the replacement of lighting fixtures in all work areas of the Shell Business Operations office in Manila considerably helps reduce greenhouse gas emissions. Total annual reduction in electricity consumption resulted in an equivalent reduction of CO2 emissions by 1,100 tonnes. Moreover, mercury content released as a result of frequent busted light replacement was reduced by 32,500 milligrams. It has also significantly minimized working at height safety risks for technical staff and contractors due to busted lamp replacement activities as LEDs have significantly longer burning hours compared to fluorescent lamps. By switching to LED, Shell’s electricity consumption went down to 15% every month, generating P9.6 million in savings per year. Project Luntian demonstrates how Shell is committed to contributing to the global effort for addressing climate change.

DLSU-Dasmarinas’ Carbon Footprint

<table>
<thead>
<tr>
<th>Year</th>
<th>Carbon Footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>9,284 tonnes</td>
</tr>
<tr>
<td>2015</td>
<td>7,016 tonnes</td>
</tr>
</tbody>
</table>

A simple office improvement project considerably helps reduce greenhouse gas emissions.
CLEAN FUELS AND ENERGY CONSERVATION

The continued use of fossil fuels, such as coal and gas, have been proven detrimental to the environment. Most businesses and cities continue to rely on fossil fuels because they remain abundant, reliable, and inexpensive. However, some are now making the big switch to cleaner fuels in order to power their businesses. Clean fuel is increasingly taking a significant share in the energy mix used by manufacturing companies.

One such company is Nestlé. The company now puts a premium on the use of clean fuel in its factories in Cagayan de Oro and has invested significantly in renewable energy sources such as spent coffee grounds, solar, and hydropower. Coffee waste is used in Nestlé’s biomass plant that transforms this waste into energy.

Recycling the company’s waste into energy resources has resulted in annual savings in waste hauling and dumping costs, reduced waste down to zero. The ash by product from this process is mixed with the sludge from the factory’s waste water treatment and is converted into soil conditioner that is then given to coffee farmers. The factory uses 150,000 kg of spent coffee grounds per day which can produce 20 ton per hour steam energy. This gives an annual savings of more than 4,000 million liters of oil in addition to reduced SOx emissions by nearly 300 tons and prevention of 70,000 tons of waste. In 2016, Nestlé Lipa factory introduced renewable energy to the factory. Nestlé has partnered with AboitizPower and has a 1,200 megawatts renewable energy portfolio of geothermal, hydro and solar energy. In all its operations, Nestlé has also reduced GHG intensity by 11% since 2010.

Mondelez Philippines’ Go Green Program installed a biomass energy facility that uses biodegradable and renewable materials such as rice and coconut husks to power the company’s production plants. As a result, the company eliminated carbon emissions equivalent to 137 plane trips from Manila to Australia and back. It also saved enough energy to light and run its plants for 4.3 months. Meanwhile, Honda Cars Philippines has opted to use demand management and advanced energy efficient technologies in order to optimize energy use and reduce emissions from manufacturing. Over the last three years, it reduced CO2 emissions by an average of 70 tonnes per year. From 2015 to 2016, it reduced such emissions by 158 tonnes. In 2016, it invested P10 million in this program but generated approximately the same amount in savings. It also improved the working environment for shop floor workers, which then led to higher productivity.

PLDT is doing air conditioner shutdowns, reducing elevator use, turning off heaters, and using automatic light switches as part of plans to optimize use of workplace resources. This conservation initiative reduced electricity consumption by 13.1 million kWh and fuel consumption was under budget by 20.8%. Reduced electricity consumption lead to an equivalent reduction in greenhouse gas emissions.

Mondelez Philippines’ Go Green Program eliminated carbon emissions equivalent to 137 plane trips from Manila to Australia and back.
Gaps and Opportunities

Government and policy makers need to get more businesses engaged in the climate change agenda. The innovative examples shown here demonstrate the willingness of companies to contribute to climate risk preparedness, reduction, and mitigation. CEOs are ready to do more but information has to be broadly disseminated as businesses want greater clarity and consistency in policymaking. An enabling environment must also be created to gather critical input from the private sector and provide them with incentives for good corporate citizenship. This way, it becomes easier to convince companies, for example, to set higher targets for emissions reduction and to disclose relevant information on these emissions.

Companies will also have to be more forward looking given how the business environment has changed as a result of climate change. Extreme weather disturbances have had serious financial consequences to many businesses, big or small. They need to go beyond the capacity-building of personnel or the development of platforms for gathering and spreading information. This means looking within their own fences and doing more extensive risk management in order to build resilience in their assets and supply chain. For example, a simple interruption in the supply of raw materials due to bad weather may severely compromise business continuity. Micro-enterprises and small and medium enterprises (MSMEs), which act mostly as distributors of goods, are vulnerable to these scenarios because of limited access to coping strategies.

Big companies and government can start working with micro-insurance companies like Cebuana Lhuillier, which now provides coverage for MSMEs to protect their businesses from natural disasters. Other possible opportunities in this area include opening or expanding into new markets, adopting risk reduction measures for physical operations, and developing resilience-oriented goods, finance, and services. Doing resilience studies of vulnerable areas needs to be prioritized.

Finally, businesses should build on the momentum generated by existing initiatives on climate change. For example, De La Salle University may consider expanding the scope of Project Carbon Neutral to affiliates and institutions of the DLSU system other than their campus in Dasmariñas.
As one of 18 mega-biodiverse countries in the planet, the Philippines has so much to gain from its wealth of flora and fauna. The country is home to two-thirds of the earth’s biodiversity with the third largest reef area in the world.

With all this bounty, the country is also one of the world’s biodiversity and conservation hotspots with at least 700 threatened species. Recent DENR satellite data also show that our forest covers continue to diminish as the rate of forest product consumption far exceeds reforestation rates.

Given these challenges, many companies are now recognizing that biodiversity is linked to business capital and any brand’s intrinsic value proposition. This is evident in how the private sector has played an increasingly pivotal role in protecting our forests and wealth of animal and plant life over the past decades.

In addressing biodiversity targets, companies would inevitably touch on other sustainability goals such as food security, water and sanitation, and sustainable settlements. This attests to the significance of biodiversity and natural capital as a foundation of our socio-economic growth.
By 2030, double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment.

By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts.

By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible.

By 2020, conserve at least 10 per cent of coastal and marine areas.

By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies.

Increase scientific knowledge, develop research capacity and transfer marine technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries.

By 2030, conserve and restore mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.

Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.

Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.

Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.

Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.
Private Sector Initiatives on

BIODIVERSITY CONSERVATION

**REFORESTATION AND BIODIVERSITY CONSERVATION PROGRAMS**

The generation of clean and renewable energy inherently supports programs that directly benefit the environment. It is thus no surprise that one of the leading renewable energy companies in the country— the Energy Development Corporation (EDC)—also has one of the most extensive sustainable forestry programs by a private firm.

EDC is deputized by the government to protect its geothermal watershed reservations since 1984. In addition to law enforcement to protect standing natural forests, as early as 1989 EDC has partnered with forest communities that have tenure in the watershed reservations to reforest denuded areas. In 2009, it accelerated its reforestation program using indigenous tree species under the “BINHI” Program which aims to restore 10,000 hectares of denuded lands in 10 years across its project sites. Now on its 8th year, the program has restored 8,964 hectares of denuded forest lands with the help of local communities with a total investment of more than P300 million.

Because of the BINHI program, EDC has bridged forest gaps, protected more than 300 species of birds, mammals and reptiles, preserved 937 species of native trees and maintained the integrity and ecosystem services of 127,608 hectares of forest lands within the geothermal reservations. In addition, EDC has partnered with 88 farmer-associations in implementing the program and in ensuring that these natural assets are protected and maintained.

Another noteworthy program of EDC is the Biodiversity Conservation and Monitoring Program (BCMP) which aims to set baselines and assess the impact of its operation to sensitive species. The program includes the regular monitoring of flora, fauna and freshwater organisms within the project sites. The program also monitors the population and behavior of selected endemic and endangered species by identifying flagship species such as the flying foxes (bats) in its Bicol site; the flying lemurs in its Leyte site; and the Philippine eagle in its Mindanao site.

From a business vantage point, EDC has achieved stable ecosystem services, such as sustaining the geothermal recharge, protection of natural habitat, continued provision of forest goods for forest dwellers and mitigating the impacts of climate change. In addition, EDC credits enhanced cooperation of local communities to address watershed challenges—as well as improved relations and reputation among stakeholders—as key business results of its large-scale green programs.

**EDC’s BINHI preserved, protected and maintained**

- **937** species of native trees
- **127,608** hectares of forestlands
- **300** animal species
In 1999, Dr. Justino R. Arboleda of Bicol University College of Agriculture founded a coconut fiber production company, which would produce anti-soil erosion products. The company sought to make profit by directly addressing three distinct developmental challenges—soil erosion, the large volume of coconut husks being considered as waste, and the meager income of coconut farmers. Today, Arboleda’s company Coco Technologies Corp. (Coco Tech) is recognized as a pioneer not only in coconut husk processing, but also in espousing a business model that directly benefits the environment and poor communities.

The company’s anti-soil erosion products are six times cheaper and more effective than concrete. Coco Tech was also able to innovate and make use of coco dust produced from decorticating coconut husks. Out of these waste materials, Coco Tech produces organic fertilizers that are estimated to be four times cheaper than inorganic ones. They also last longer and contain more micro-nutrients. Through continuous research and development, Coco Tech also successfully innovated low-cost housing fiber boards and coco fiber mattresses.

Able to engage poor communities both from the supply and demand sides of the business equation, Coco Tech has been able to provide steady livelihood opportunities for poor farmers, home-based female entrepreneurs, and even the elderly, who are paid to twine and weave coco fibers at their own homes. Starting with an initial investment of P3.5 million, the company’s assets grew to P10.6 million in 2005 to P84 million in 2015. It has provided livelihood to 1,500 families, covered more than 2.6 million square meters of bioengineered slopes, and prevented flooding in thousands of households.
In line with the SDG targets to fight poaching and trafficking of protected species, companies such as Boysen Paints are leading the way in ensuring that some of our rarest animal species are shielded from harm and extinction.

Boysen Paints has long been identified with the eagle. Its first corporate logo, inherited from the original Walter N. Boysen Paint Company in the United States, was the American bald eagle. To celebrate its Philippine heritage, the company changed its logo to the Philippine eagle, a giant forest raptor considered one of the three largest and most powerful eagles in the world. It is also one of the world’s rarest and most critically endangered vertebrate species. The two main threats to its survival are poaching and deforestation.

With Boysen’s support, the Philippine Eagle Foundation is able to continue combating the fast decline of this eagle. The foundation cares for injured birds, raises hatchlings for reintroduction to the wild, and works closely with communities for the proper care and protection of this critical species.

This corporate campaign goes beyond public relations, as Boysen also follows best practices in environment, health, and safety standards. One of the first paint factories in the country to receive the ISO 14001:2004 Environmental Management Certification, signifying that its operations are at par with international standards for environmental management.

The Philippines has one of the world’s longest coastlines in the world with about 36,000 km. Our reefs host 464 species of hard corals and 1,770 species of fish. These support numerous coastal communities for livelihood which in turn feed the entire country with the bounty of the sea. This high rate of biodiversity and long coastline make it a hotspot for illegal activities and a challenging region for law enforcement.

Together with multi-sectoral partners, the private sector has found ways to help protect our marine life and spearhead efforts to enhance it.
MARINE LAW ENFORCEMENT: The ‘Center of the Center’

Acting on the results of an in-depth study, First Gen partnered with First Philippine Conservation, Inc. and Conservation International for a groundbreaking marine biodiversity protection project called “Center of the Center.”

The said study, conducted by scientists from the Smithsonian Institution in 2004, revealed the high significance of the Verde Island Passage as a prime center of marine life, leading the scientists behind it to call it the “Center of the Center of Marine Biodiversity” in the world.

The strait, which crosses areas of Batangas, also separates Luzon and Mindoro and connects the South China Sea with the Tayabas Bay and the Sibuyan Sea. It is also home to a vast marine ecosystem, whose diversity surpassed even those of Australia and Indonesia. But as a result of rapid industrialization, poaching, and destructive fishing methods, a good number of fish species there were already facing extinction.

All these prompted First Gen to act quickly in 2004 alongside other concerned groups through community organizing, research, training and capability building, and marine protected area identification. Today, First Gen remains an advocate of the Center of the Center (COC) Program by providing support to the community-based marine law enforcement volunteer group Bantay Dagat (Sea Patrol) in the 15 municipalities/city of the Province of Batangas. The teams conduct investigative trips to enforce marine laws, regulate divers by monitoring diving permits, assist in diving accidents, and monitor fishing activities for any evidence of illegal methods.

With an investment that has now reached around P37.5 million, First Gen has been able to secure 2,702 hectares of highly rich marine protected areas in partnership with the Provincial Government of Batangas. This project has also led to the enactment of Executive Order No. 578 establishing a national policy on biodiversity and the creation of the first Global Marine Species Assessment (GMSA) Office in Asia Pacific.
BETTER WORLD FOR THE PAWIKAN

Aboitiz Equity Ventures has so far infested around P13 million in a biodiversity park and learning facility at Sitio Punta Dumalag, Matina Aplaya, Davao City. Dubbed as the Aboitiz Cleanergy Park, this eight hectare property serves as a sanctuary for the critically endangered hawksbill turtle (locally known as Pawikan), thus allowing diverse ecosystems to flourish even in an urban setting. According to the company, the park also provides a unique environmental education opportunity because of its proximity to the city proper.

Through a partnership with DENR, this Aboitiz initiative has already resulted in the release of 2,503 turtle hatchlings. It has likewise encouraged the many different stakeholders like the local government units and agencies, the academe, private companies and individuals to support the preservation of the sanctuary. Tree planting also is one of the activities that the supporters actively promote to help propagate coastal trees particularly mangroves that attract many different bird species which have lately been noted to increase in number.

NOTABLE PARTNERSHIPS

Smart Communications Inc’s DALOY 3546 is a great example of how public-private sector synergies can yield significant results for our sea bodies and marine life.

DALOY stands for Dedicated Alert Lines for Ocean Biodiversity. It is a hotline managed by the Philippine National Police-Maritime Group (PNP-MG) together with USAID-ECOFISH, which uses Smart’s telecommunications network. It serves as an efficient way for citizens to report illegal fishing and marine wildlife trafficking crimes anonymously.

Globe signed a Memorandum of Agreement (MoA) with Hineleban for a five-year Reforestation Program composed of three key components, namely: reforestation, food security, and sustainable livelihood development.

DALOY 3546 use web and SMS technology to send reports, store messages, and analyze data for better policies and more strategic government actions concerning marine-related activities. Illegal fishing and marine wildlife trafficking are often detected and witnessed in coastal communities but the government fails to curb these crimes due to weak and inadequate law enforcement.

With the use of Smart’s available technology, maritime police officers have been mobilized to respond to marine violations reported and sent to the DALOY System. The hotline also provided valuable information that helps the work of several inter-agency operations (local government units, police, etc.) and improved coordination among the different maritime protection agencies in the pilot area of Tawi-Tawi. The project also aims to be launched in different parts of the country as well. Globe signed a Memorandum of Agreement (MoA) with Hineleban Foundation for a five-year Rainforestation Program composed of three key components, namely: reforestation, food security, and sustainable livelihood development.

The foundation is a non-profit organization which advocates environmental conservation and livelihood development by preserving and restoring mountain rainforests and watersheds, as well as providing livelihood opportunities for indigenous people in Bukidnon and Lanao del Sur.

Hineleban Foundation works on the restoration of the environment and builds sustainable livelihood for the Lumads and the Bangsamoro through Transformational Business Partnerships. It has also signed a “Sacred Customary Compact” with the Seven Tribes of Bukidnon, duly recognizing the role of the latter as custodians of the forest.

Globe Telecom’s partnership with Hineleban Foundation is part of its Climate Action Program which advocates for the protection and preservation of the natural resources for succeeding generations.
PROTECTING A WORLD HERITAGE SITE

Shell Philippines Exploration BV, has a program which sustains conservation gains in the Tubbataha Reefs Natural Park—a UNESCO World Heritage Site that is home to about 10,000 hectares of coral reef and is extremely rich in marine life.

Shell has provided financial resources to enable the effective management of this global center of marine biodiversity. The company has also supported information drives that strengthen conservation efforts among nearby communities and in areas where illegal fishing activities are high.

Aside from its educational impact, which has now reached 41 coastal communities and yielded several scientific research outputs, the program also enhances Shell Philippines’ reputation as a supporter of critical environmental issues. According to the company, this program is also a testament to the global Shell brand’s commitment to the World Heritage Committee of UNESCO to exclude World Heritage Sites from energy exploration and extraction.

MOVING FORWARD

Clearly, the private sector has a lot to gain from protecting biodiversity, especially for industries such as energy, real-estate, and tourism, which rely on the sustainable use of land and marine life to remain viable as a business.

In partnership with the government and scientific groups, companies can play a pivotal role in preserving and restoring vital ecosystems by developing business models and strategies that directly address biodiversity.

For example, there are still limited investments on sustainable fishery practices, nutrient pollution reduction, and marine debris pollution prevention. There is also a limited number of business models in the Philippines that incorporate ecosystem services and biodiversity into their core strategies. In addition, this limitation prevents large investors from considering biodiversity as a business opportunity. However, as the case studies here exemplified, biodiversity efforts receive a huge boost and scale up with private sector support. Businesses, too, form better relationships with stakeholders such as the community, civil society, and government, and even earn profits when they internalize biodiversity into their business model.

Businesses can also address the seemingly limited exchange of ideas between the business sector and conservationists. By creating channels of communication between financiers, scientists, and nonprofit advocates, private firms can enlarge the knowledge of investors on biodiversity and inspire them to channel fresh funds to explore business opportunities in protecting our wealth of wildlife.
04 SDGS on Infrastructure
Infrastructure or actual physical facilities, such as roads and houses, water and sanitation networks, and power and telecommunication lines, are the building blocks of our economies and societies.

Poor performance infrastructure thus directly affects competitiveness, weakens delivery of education, health and other social services, and hampers poverty alleviation.

Given the Philippines’ booming population and the challenges that come with its archipelagic structure, proper distribution of infrastructure is a requisite to addressing problems such as poverty and access to health and sanitation, among other critical areas.

In order for the country to truly achieve sustainable development and lasting prosperity, strategic infrastructure spending in both public and private spheres must become the norm.

In recent years, the private sector has been able to fill in critical gaps in public financing and management of infrastructure by actively supporting public-private partnership business models. Such collaborations are crucial to business success, given how aging and insufficient infrastructure hampers businesses productivity and growth.

In this section, we review some notable private sector contributions to sustainable industrialization in the key industries of power, water, housing, telecommunications, and transportation.
ADDRESSING WATER AND SANITATION CHALLENGES TODAY

SDG Targets Being Addressed

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

6.7 By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

6.8 Support and strengthen the participation of local communities in improving water and sanitation management.
Access to water and sanitation are not only critical sustainable development challenges. They are basic rights and are absolutely necessary for any person to live with dignity.

But despite these fundamental principles and the availability of water resources, crucial gaps in water and sanitation services occur in the Philippines. As a result, the country has yet to achieve universal access to water supply, sewerage and sanitation (WSSS)—a prerequisite for achieving most of the targets of the SDGs.

According to the results of the 2014 Annual Poverty Indicators Survey (APIS), 3.29 million families still rely on unsafe sources of water. These sources include unprotected wells, springs, and ponds, as well as unregulated private services that peddle water by small tanker trucks. Meanwhile, 1.36 million families in the Philippines still use the open pit, drop or overhang, and pail system. About 7 million Filipinos, as of 2015, continue to resort to open defecation.

With the government and the private sector in the lead, the country must resolve these issues before the headways we have achieved in various developmental fronts are threatened. Increasing pressure on water quality and availability as a result of climate change, moreover, threaten to magnify and multiply business risks in previously unforeseen ways.

Maynilad and Manila Water—two of the largest and most successful water companies in the Philippines—are concrete examples of how business and development can come together to address development gaps and result in inclusive infrastructure investments.

Aside from investing in infrastructure and engaging directly in water services, business ventures can also fill in funding gaps for water-related programs, as is the case for the Development Bank of the Philippines’ financing scheme. We detail some of these outstanding business examples, as well as other longstanding gaps, in this subsection.
The water and sanitation sector in the Philippines is decentralized, with local government units having the authority to determine how services are provided to their constituents. According to 2009 NEDA estimates, 25% of piped water services are being provided by private companies. Among these, Maynilad and Manila Water are able to directly address the SDGs on water while remaining profitable for its shareholders.

These two companies have also shown that it is possible to provide affordable and reliable access to safe drinking water to low-income communities. Their highly inclusive business models specifically targets groups at the base of the pyramid to bring in financial sustainability while generating wide-scale positive impacts on society.

Manila Water has reduced non-revenue water (NRW) from 63% at the start of its business in year 1997 to only 10.8% in 2016. As of end 2016, the company has also reached 6.62 million people, achieved 1,008,918 water connections, provided 99% of its customers with non-stop access to water, and helped decrease cases of diarrhea in its service area by 51%. Together with its subsidiaries, Clark Water, Laguna Water, and Boracay Water, it has treated 9,003 tonnes of organic pollution from reaching water bodies. Notably, access to water now costs 20 times lower for poor communities, and the company’s successful operations has resulted in the creation of USD500,000 worth of new jobs.

Maynilad has also achieved outstanding results, especially in the environmental front. With its sustained focus on refurbishing infrastructure in some of Metro Manila’s oldest districts, the company has prevented 86.5 million kg of pollution such as suspended solids and oil and grease the company has treated 58 billion cubic meters of waste water in 2016, preventing 86.5 million kg of organic pollution, suspended solids, and oil and grease from reaching the rivers and eventually into the sea. As of the same posting period, the company has also considerably upped its coverage figures - it has produced 864 trillion liters of water, served 9.3 million people, covered the sanitation needs of 5.50 million people, and desludged 96,500 septic tanks.

Innovative programs, such as Manila Water’s Tubig para sa Barangay (TPSB), transform poor communities who previously had no access to water services into paying customers and active partners of the company.

These are all testaments to the capability of business to achieve significant benefits for poor customers through entrepreneurial ingenuity, commitment, and rigor.
Beyond their core business strategies, Manila Water and Maynilad pursue a host of sustainability and corporate responsibility programs that further enable both companies to achieve market inclusivity, cut down illegal connections, and ultimately reduce non-revenue water losses.

Another innovative scheme is Manila Water’s Lingap Program, which complements the successful TPSB. This CSR program enlarges the social and health benefits that the company brings by installing drinking fountains and wash areas, and providing sanitation facilities in public schools, hospitals, orphanages, markets, city jails, and churches. To date, more than 380 institutions and over 1.5 million beneficiaries have benefited from this program.

**Recipients of Manila Water’s Lingap Program**

- **380 institutions** + **1.5 million beneficiaries**
- **10 communities**
- **102 schools**
- **26,215 students taught**
- **300 drinking and washing stations**

received access to drinking fountains, wash areas and sanitation facilities
A regulatory and financing environment that is supportive of smaller firms can greatly enhance the provision of water services in remote and poor areas. This is exactly why the DBP, the country's leading development financing institution, is easing the difficulty of fundraising large amounts of capital for smaller players who wish to enter the water services industry.

Through its Environmental Development Project, the DBP provides loan and technical assistance to institutions and projects that focus on water supply and sanitation, among other development areas.

In partnership with the Private Financing Institution (PFI) and the Philippine Water Revolving Fund (PWRF), the program has opened doors to various funding options and has allocated P6.386 billion in support of 21 clean water and sanitation (WATSAN) projects. These projects have resulted in an additional yield capacity of 583,387 cubic meters per day; an increase in water production of 210 million cubic meters per year; an added 3,000 cubic meters per day of sewerage treatment capacity; and 273,929 additional water service connections, benefitting more than a million people in some of our poorest and geographically isolated communities.

Maynilad’s Daloy Dunong Water Education Drive

- 300 Drinking and washing stations
- 10 Communities
- 102 Schools
- 26,215 Students

Maynilad also pursues a host of corporate social responsibility programs that aims to enrich the publics’ knowledge of water and sanitation issues and improve community hygiene, while reaching various business goals such as water-use efficiency and improved water quality.

For instance, Maynilad’s Daloy Dunong Water Education Drive, equips numerous communities with the knowledge needed to prevent water-borne diseases and maintain the availability, safety, and potability of their water supply. As a result, the program transforms beneficiaries into active participants in improving their own water and sanitation management.

With an investment of over P1 million, the program has so far reached 10 communities and 102 schools, taught 26,215 students, and installed 300 drinking and washing stations in Maynilad’s concession area. This investment is expected to produce quantifiable results in the long-term, as the knowledge acquired from these schools are upheld and passed on to more communities and families.
Gaps and Opportunities

The prevailing gaps in the provision of water and sanitation services in the country are partly attributed to the fragmented governance structure of the sector. There is no apex body assigned to oversee overall planning, programming, and policy formulation based on sound data, which results in uncoordinated initiatives and inefficient provision of services, especially in rural areas.12

WSSS companies may look into strengthening partnerships and engagement processes with relevant government agencies, especially in the areas related to the creation of an apex body, strengthening of rules, and implementing institutional reforms.

In addition, entrepreneurs who are interested in entering the water services industry may look into other key gaps, including the limited supply and increasing demand for wastewater treatment and sewerage facilities.

Beyond these gaps, a wealth of opportunities can be pursued in provincial areas and distant communities who still lack access to proper services. Companies may participate in strengthening the capacity of LGUs to implement projects, as well as in harnessing the country’s PPP framework 13 to enable the private firms to effectively partner with LGUs for WSSS provision.

Community leaders at the grassroots level must also be empowered to facilitate water distribution and proper sanitation services to their immediate communities. New business models catering to this highly localized approach may prove to be simultaneously socially relevant and lucrative given the right approach.

Other possible business actions and solutions include the use of the latest wastewater treatment processes and the development of new raw water sources via ecologically sustainable solutions.
ENSURING UNIVERSAL ACCESS TO CLEANER ENERGY

SDG Targets Being Addressed

Ensure access to affordable, reliable, sustainable and modern energy for all

7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services

7.2 Increase substantially the share of renewable energy in the global energy mix by 2030

7.a 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
The Philippines faces two major energy challenges. First is the continued lack of access of poor and geographically isolated communities to electricity. The second relates to the ability of the power sector to generate cleaner forms of energy as a sustainable business venture.

As detailed in the Philippine Development Plan 2017-2022, there are still critical gaps in the access to electricity in remote and off-grid areas. Only 20.36 million households have access to a steady supply of energy. This means a tenth of the total number of homes in the country still lead their lives with limited to zero access to electricity.

Generating sustainable or renewable energy is another major goal the country must achieve. Towards this end, the county passed the Renewable Energy Act in 2008 and created the National Renewable Energy Program in 2011 to guide the full implementation of the law. Despite these notable efforts, only 7,013.9 MW of renewable energy has been installed out of the country’s estimated 14,499.8 MW potential. This has energized some companies to strike out in fresh directions to reach those who are still unserved, while setting the stage for the renewable energy as profitable business model. In this subsection, we review some inspiring and inventive business concepts that light up the way toward universal access to energy in a way that reduces the nation's greenhouse gas emissions.

**Household Electrification as of December 2015**

- **Served Household:** 13,088,991
- **Unserved Household:** 714,823
- **Total:** 13,803,814

Legend:
- **Orange**: Served Household
- **Green**: Unserved Household
Our total GHG emission from energy-related activities reached 73.3 million tonnes of carbon dioxide equivalent (MtCO₂e) in 2011 from its 2010 level of 72.8 MtCO₂e. Higher fossil fuel demand in power generation caused this slight increase.

Meanwhile, the country’s GHG emission from all sectors dropped, except for the power sector, which accounts for 44.1 percent of our total GHG emission and contributes the largest amount of 32.3 MtCO₂e to our overall emissions total. ¹⁴

Meanwhile, a study conducted by the Renewable Energy Coalition reveals that the Philippines has renewable energy potential (see right).

These are encouraging figures for those interested in investing in renewables, as expanding its use leads to lower generation costs, especially in the long term. In recent years, regulations such as Net Metering, Renewable Portfolio Standard (RPS), and Green Energy Option are being established to facilitate the transition to sustainable energy in the country. Through Net Metering, owners of solar panels up to 100 kW can not only satisfy their own electricity demand, but supply to the local electricity grid as well. RPS for its part will set the minimum percentage of generation from eligible renewable energy sources. Green Energy Option, on the other hand, provides consumers with the option to choose RE as their source of energy.

Transitioning to a cleaner energy network will require the participation of all sectors, especially the private sector, which has the expertise and the best insight on our capabilities to invest in renewable energy sources, build clean energy infrastructure, and develop better technologies and practices. ¹⁵

By investing today in research and development toward new technologies, the private sector can become the center of lasting energy and climate change solutions. Business can also accelerate progress by committing to sourcing 100% of operational electricity needs from renewable sources or at least from cleaner fossil fuel technology.
## Competitiveness of Renewable Energy
### as of May 2007

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<td>Solar grid-connected</td>
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POINEERS IN NATURAL GAS

First Gen Corporation’s Santa Rita and San Lorenzo Power Plants are the country’s first natural gas plants. As trailblazers in this field, both plants have helped pioneer the gas industry through securing gas off-take through a Gas Supply and Purchase Agreement (GSPA) with the Malampaya Consortium, which manages the field under Service Contract (SC 38). The plants have also been able to enter into a Power Purchase Agreement (PPA) with leading electricity distribution company Meralco, thereby making the generation of energy from natural gas a profitable business innovation in itself.

Recent figures from the entire year of 2016 show inspiring results for these plants. Combined, both plants have added 1,500 MW of installed generation capacity, generating a total of 11,140 million kWh of clean electricity which provided more than 16% of Luzon’s power needs.

Both plants have also operated with minimal GHG Emissions in 2015, leading to a total of around 6.6 to 6.9 M tonnes of CO₂ avoided. This correlates to around a 61% reduction in CO₂ emitted into the environment. Compared to coal plants, Santa Rita and San Lorenzo also operate with less SOx, NOx, and particulate matter, emitting ash and sludge.

The plants’ revenues and net income remain consistent, with San Lorenzo posting revenues of USD 535,141,000 and a net income of USD 87,648,300, and Santa Rita posting revenues of over USD 291,535,600 and a net income of USD 46,175,300 for 2016.

BIOFUEL DIVERSIFICATION

As part of their inclusive business model, SEAOIL Philippines invested in the development and creation of more renewable energy sources starting in 2005.

The company sets itself apart from competitors by exceeding the 5 percent ethanol-gasoline blended requirement of the law. Prior to the 2006 biofuels act, the company had already developed its E10 diesel, which reduces carbon dioxide emissions and increases energy conservation levels.

As the first company to produce biodiesel in the Philippines, SEAOIL’s innovations have opened pathways to sustainable energy by making petroleum that is less harmful to the environment available to a larger market. From a business vantage point, the cost is reduced as domestic production of renewable energy which would have otherwise been imported by the company at much higher costs.

According to SEAOIL, “affordable and clean energy have long been a struggle for many developing countries like the Philippines. As the consumption of electricity increases, weak legislation, and monopolies have led to environmentally unsafe outcomes. By pursuing cost-effective alternatives to fossil fuel production, projects like the biofuel diversification of Seaoil Philippines are a step towards sustainable energy for mass consumption.”

SEAOIL Philippines’ E10 diesel reduces carbon monoxide emissions and increases energy conservation levels
BANKING ON TURBINE TECHNOLOGY

The potential of renewable energy to become a viable and lucrative venture is evident in the commitment and trust First Gen places on expanding its green portfolio, with gas plants continuing to provide clean and reliable support to renewable development. Aside from its Santa Rita and San Lorenzo plants, the company has recently invested a total of approximately USD 750,000,000 in the San Gabriel Power Plant and Avion Power Plant, located in the First Gen Clean Energy Complex in Batangas City. One of the things that make these plants unique is their use of new turbine technology that is poised to further enhance the country’s green energy landscape.

The Avion Power Plant is the first land-based power plant in the Philippines to use aeroderivative turbine engines. These turbines are the reasons behind Avion’s ability to ramp up and down as quickly as it does, making it crucial to stabilizing the grid, supplying peak demand, and providing a reliable support to intermittent renewables. The plant started operating in September 2016, and is expected to contribute toward the clean energy goals of the country with it fast start technology to support the grid’s needs.

This technology is also known for producing a reliable supply of electricity. Particularly important during times of increased demand, Avion is able to reach a full load in around 15 minutes, up to 50 times faster than a coal plant. This helps prevent brownouts by quickly reacting to the volatile needs of the grid.

Another First Gen power plant that introduces technological innovations is San Gabriel, which uses Siemens’ combined-cycle gas turbine, also known as SCC6-8000H. This is designed to have a combined-cycle efficiency rating of approximately 60 percent, while also offering operational flexibility. San Gabriel’s efficiency means that it can produce the same amount of output while requiring less fuel input. Because of this technology, San Gabriel has been branded as a “Flex Plant” by Siemens — the first to be branded so in the Philippines — a label that describes its flexibility to start and stop at least once a day operating when the plant is most needed. The technology can thus adjust more capably to periods when the grid has varying or volatile needs, making it suitable for mid-merit operations, as operations are optimized towards this portfolio.

San Gabriel started operating in November 2016 and already contributes 414MW of clean energy to the grid. In fact, the new San Gabriel technology avoided estimated energy requirements of 67,918 GJ’s and avoiding GHG emissions of 3,054 tons during San Gabriel’s operations in 2016. As such, its efficiency makes it able to provide the needed electricity with even less tons of CO\textsubscript{2} per MWh generated.

San Gabriel Power Plant avoided GHG emissions of 3,054 Tons due to its technology
HARNESSING EXCESS HEAT

Solid Cement Corporation is another company that explores technological innovations to address the country’s clean energy goals.

CEMEX Philippines’ WHR system resulted in the avoidance of 20,000 tonnes of coal

By actively seeking to improve its efficiency, the company’s cement plant in Antipolo, Rizal, has found a way to transform the excess heat escaping from its cement kilns into electricity. With the support of Sinoma, a Chinese company that is an expert in this technology, CEMEX Philippines has been able to develop a waste heat recovery (WHR) system specifically designed to recycle the excess heat emitted by the cement kilns and then channel it to a turbine that generates it into electricity.

According to CEMEX Philippines, this WHR system is the first of its kind in the CEMEX global network. The innovation required P1 million in direct investment. The WHR facility generates at least 35 GWh annually equivalent to the avoidance of at least 20,000 coal per year.

In 2015 alone, the company avoided buying 25% of its total requirements from fossil-fuel generated electricity in the grid. In the next three years, CEMEX aims to establish a similar system for its plant in Cebu.

NEW WIND AND SOLAR FARMS

Ayala Corporation, one of the oldest and largest conglomerates in the Philippines, entered the energy sector in 2005 when it incorporated AC Energy Holdings Inc. AC Energy is building a diversified portfolio of conventional and renewable power generation assets through the acquisition of brownfield and development of greenfield projects. Since 2011, AC Energy has assembled 700+ megawatts of attributable capacity in both conventional and renewable power generating assets. This translates to over $700 million in equity committed in the power sector.

Beyond its stake in several coal-fired power plants, the company continues to expand its renewable energy portfolio by investing in wind and solar farms. These include the Northwind Power Development Corp., North Luzon Renewables (NLR), and Monte Solar Energy.

The Northwind and North Luzon wind farms are both located in Ilocos Norte. Northwind uses 26 units of wind turbines with a net capacity of 52 MW, while NLR uses 27 units of wind turbines with a net capacity of 81 MW. Monte Solar in Negros Oriental, on the other hand, uses 67,920 modules of solar panels.

Today, these plants continue to produce encouraging results towards the country’s renewable energy targets.

ENSURING ACCESS TO ENERGY FOR ALL

In remote and underserved regions, connection to the main power grid is often unviable because of high costs and the low incomes of most end users. In some areas of Mindanao, per capita incomes can average to less than P100 a day. In addition, high-cost structures and poor reliability in off-grid areas, characterize some state-owned power ventures that are mandated to ensure access for all.

One Meralco Foundation’s Community Electrification Program develops feasible electrification alternatives using innovative socialized schemes for various community
types. These include informal settlements, families unable to meet the minimum legal requirements to apply for a connection, and off-grid public schools in remote island and mountain villages. In the past six years, the program has brought electricity to the homes of 25,582 families and 171 schools nationwide, the farthest of which is in the municipality of Sitangkai, Tawi-Tawi.\textsuperscript{16}

Shell Exploration Philippines BV, on the other hand, taps into available resources onsite, especially renewable resources, to target communities that are unlikely to gain connections in the next five to 10 years. This highly strategic program called Access to Energy Project has been running since 2015 and is maximizing about P12 million in capital expenditures to reach some of our most economically challenged communities.

One promising business model that zeroes in on access to power as its core brand proposition is the ACCESS Program by Hybrid Social Solutions, Inc. The organization is a pioneering social distribution company that provides high-quality but affordable energy solutions for the unserved. It carries a line of solar home appliances that enable our poorest and most remote communities to gain access to fundamental services. These solar-powered appliances include lights, mobile phone chargers, power boxes, and other low-power DC home devices. According to the group, all their products are a result of topnotch design and has been manufactured from durable materials to ensure long-term use.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{electricity.jpg}
\caption{18,997 families 170 schools}
\end{figure}

Gaps and Opportunities

The Philippine government’s 100 percent electrification target for the Philippines by 2020 puts the spotlight on the continued lack of access to electricity of 2.36 million households. This has resulted not only in huge economic challenges for many families, but also prolonged periods of unrest and conflict in several areas in Mindanao. In terms of demand, the Luzon grid alone will need 4,985 MW additional capacity by 2030. The Visayas will need an additional capacity of 1,256 MW, and Mindanao will require 910 MW, also by 2030.\textsuperscript{17}
IMPROVING ACCESS TO ICT THROUGH MOBILE TECHNOLOGY

SDG Targets Being Addressed

9.c Significantly increase access to ICT and strive to provide universal and affordable access to internet in least developed countries by 2020
Filipinos thrive on staying connected with their communities and families. News about loved ones travel instantaneously across long distances, giving strength to those separated by economic opportunities elsewhere. Modern networks make it possible to easily share information that can boost agricultural productivity or develop small businesses. In times of crisis, disasters, or a health outbreak, the dissemination of real-time information is crucial to saving lives.

In the next decade, the nation’s biggest challenges in education, transportation, health, and other basic services will all be solved by internet access and big data science. At the forefront of this digital revolution are mobile solutions generated primarily by the country’s growing startup market. The Philippines startup community is developing internet-related innovations that directly address such pervasive issues as poverty alleviation, financial literacy, and healthcare access.

The country ranks 15th worldwide in terms of the number of internet users yet it ranks 112th in internet penetration, as less than half of the population, or about 44.5 million people, have access to the internet. Access to mobile phones and smart phones may have helped improve these numbers given the 75% share in Unique Mobile Social Penetration by Country. The Philippines rank 15th in this index which shows the number of unique individuals using mobile phones of any type by country compared to national populations.
TRANSFORMATIONAL BUSINESS

Private Sector Initiatives In

IMPROVING CONNECTIVITY

MAKING MOBILE SOLUTIONS MORE AFFORDABLE

Many are increasingly using their phones to connect via social media applications as such service is mostly given free to users by the country’s two service providers. Yet despite the widespread popularity of mobile phones, these devices are still used primarily for text messaging and making calls.

For a time, making a call remained expensive. However, as of January 1, 2017, the interconnection rate of Globe Telecoms and PLDT voice services is no longer higher than P2.50 per minute. Calls made within the same network cost even less. Mobile-to-mobile and landline-to-mobile voice calls used to cost P4 per minute while mobile-to-landline voice calls used to cost P3 per minute. With Globe alone having a smartphone penetration of approximately 50% of subscriber base, about half of whom pay for data, this rate reduction will invite more people to get a mobile subscription and make use of their phones for accessing the internet.

BUILDING ADEQUATE MOBILE INFRASTRUCTURE

In the Philippines, numerous users share a very limited mobile bandwidth, affecting internet experience of mobile data users. Compared to its Asian neighbors like Vietnam which has around 55,000 cell sites and China which has a million, the Philippines needs to catch up and construct more cell sites in order to increase available bandwidth for its growing population of connected users.

PLDT has over 140,000 kilometers of fiber links, the most extensive fiber infrastructure in the country, that’s built over and under the rugged terrain of the country’s archipelago. This infrastructure supports both the roll out of fiber facilities and hybrid fiber technologies to homes and enterprise all over the country, and the operations of the mobile services of Smart and Sun.

To serve its over 63 million mobile subscribers, particularly to make internet services in the country faster, more reliable, and affordable, Smart Communications is expanding and beefing up its LTE and 3G mobile data networks. To date, Smart has already completed these network improvements in Metro Davao, Metro Cebu, Rizal, and some parts of Metro Manila, where users have reported much improved data coverage and speeds.

Smart’s commitment is to bring these improvements to the rest of the country, and to make Smart LTE available in 95% of Philippine municipalities, serving about 97% of the population, by the end of 2018. Smart is focused on LTE because LTE, an all-IP network, delivers superior experience for users, particularly for data.

Globe Telecom on the other hand has a total of 32,846 base stations in 2016, with over 21,300 for 4G (including HSPA+, WiMax, and LTE), supporting the service requirements of its 65.17 million subscribers. For fixed line internet, Globe aims to connect 20,000 barangays and two million homes by 2020.
In this age of increased connectivity, access to the internet is crucial to the success or failure of enterprises, including small businesses. The internet speed in the Philippines, however, is still one of the world’s slowest and is severely affecting the ability of many enterprises to operate efficiently. Technologies that promote ultra high-speed connectivity, like optic fiber technology, remain very expensive and are therefore available only in very limited parts.

Telecommunications companies are presented the opportunity to invest in new technologies and facilities that can improve ICT functionality and enhance interconnectivity. Globe’s acquisition of Bayan, alongside various network upgrade projects, has improved 3G/4G coverage. Smart and Nokia are laying out the foundation of a 5G network, as LTE subscribers are expected to grow to around 40% of total mobile subscriptions by 2018.

Globe Telecom is investing close to $500 million over a five-year period beginning 2016 to expand its corporate data network to meet the ever-increasing bandwidth requirements of corporate and enterprise clients. This initiative is expected to attract more foreign investments and spur the growth of the Philippine economy.

Meanwhile, the newly created Department of Information and Communications Technology (DICT) seeks to build submarine cable landing stations, a government backbone for the whole country, and a last mile access network as part of plans to establish a Philippine Integrated Infrastructure. Plans are also in place for public-private collaboration to find solutions on how to connect remote locations to the rest of the country.

Globes and Opportunities

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Globe Broadband customers grew to 1.2 million in the first quarter of 2017, representing an 8.8% growth YoY.

One of telecommunications companies’ biggest challenge is accelerating infrastructure development, while convincing communities to allow them to build cell sites in their neighborhood, as communities often fear unfavorable health impacts. It is important for the community to know the public benefits on this regard, and the companies should demonstrate that it is safe to live near a cell site.

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UNDERSTANDING THE DEMAND FOR AFFORDABLE HOUSING IN CITIES

SDG Targets Being Addressed

By 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums

By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities
By the year 2050, more than half of humankind or about 70% of the world’s population will live in cities. Housing will therefore play a massively substantial role in the future and shape of cities. SDG 11 seeks to make cities and human settlements inclusive, safe, resilient, and sustainable. It likewise aims to upgrade slums and ensure universal access to adequate, safe, and affordable housing. These 2030 targets also include providing widespread access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons, and persons with disabilities.

For the period 2017-2022, approximately 6.8M housing units will be needed.

DBP’s RRFP seeks to deliver an additional 3,000 shelter units to the exiting inventory and livelihood assistance to at least 2,000 households through microfinance.

In the Philippines, our population is projected to grow to 142 million by the year 2045. A huge share of this number will be people living in the rapidly evolving cities across the country. Urbanization is moving at such a rapid rate as a result of high population growth and the continued influx of migrants from rural areas. These people will obviously need adequate houses to live in, with access to economic opportunities and basic services.

The total housing need of the country remains enormous. For the period of 2017-2022, approximately 6.80 million housing units will be needed. As of December 2016, the housing backlog stood at 2.02 million units. This demand presents revenue opportunities for businesses, particularly those involved in socialized or economic housing as majority of these units are housing for the poor or low-income people.

Businesses play a critical role in the holistic urban development of cities. They have devised innovative approaches and systems to address the gaps in jobs and livelihood, capability building for community groups, and basic services like water, electricity, sanitation, and transportation. They have also come up with alternative and inclusive finance mechanisms for low-income housing. These are gaps that are typically observed when government relocates communities from inner parts of the city to the outskirts.

Cities and local governments that are seeking to realize their sustainability objectives can benefit from engaging with businesses early in the planning and strategy development process. They can leverage the capability of business to identify cost-effective solutions to complex and crosscutting urban sustainability challenges. Together, business and government, along with civil society and relevant stakeholders, can jointly analyze, discuss, develop, and act on a common agenda for urban reform and sustainable development.
Providing Access to Low-Income Housing

The unmet demand for housing units represent the housing requirements of low-income or poor families. Developers and other companies have now started projects geared to this market. Banks and other institutions have also expanded access to their financial products to the poor or to people whose incomes are derived from the informal economy.

The Residential Real Estate Financing Program (RRFP) is the banner shelter program of the Development Bank of the Philippines. It makes use of innovative microfinance programs, among others, to provide employees and overseas workers access to funds for housing. Among its remarkable programs is the Homeowners Association (HOA) Lending Modality, which pioneered commercial lending for housing to community associations in 2008, and the NGO and Housing Cooperative Lending Modality, which supports nonprofits and housing cooperatives with a proven track record in shelter delivery, community organizing, and savings and credit programs. It also actively supports public-private partnerships for affordable housing, as well as stand-alone private sector and local government housing initiatives. So far, RRFP has invested P13.69 billion as of June 2016 into 242 real estate projects nationwide, which include land acquisition by local government units, site development, and construction. It seeks to deliver an additional 3,000 shelter units to the existing inventory and livelihood assistance to at least 2,000 households through microfinance.

Another program that supports housing microfinance that targets low-income families is the Tahanan Ko Initiative of Republic Cement Services. Done in partnership with three microfinance institutions, namely Tulay sa Pag-Unlad, Inc. (TSPI), Alay sa Kaunlaran, Inc. (ASKI), and Negros Women for Tomorrow Foundation (NWTF), the initiative equips account officers of these three institutions with marketing materials and presentation skills to better sell housing loans to qualified members. It also ensures that projects are done according to appropriate building and sanitation standards using only high-quality materials. This is why it has delivered better designed and better built homes to 294,000 people.

In addition, the country now has more private developers that are finding profitable business solutions to addressing the housing needs of the bottom of the pyramid. Bella Vita by Ayala Land, Inc. targets low-income households with monthly earnings of only P10,000 to P25,000, or those who can afford to pay P2,500 to P2,800 in amortization. Lumina Homes by Vista Land and Landscapes is another housing development that provides socialized housing valued at not more than P450,000 to mostly minimum wage earners.
PROVIDING SHELTER TO DISASTER-AFFECTED AND DISPLACED FAMILIES

The Philippines ranks third globally in combined disaster risk exposure and vulnerability.

Recent extreme weather disturbances have shown that those living near or along the coastlines are most vulnerable to climate change impacts and natural disasters. Typhoon Yolanda (Haiyan), for example, left 550,928 families homeless in the islands of Samar and Leyte, and partially damaged 589,404 more houses. In the wake of such disasters, housing responses usually fall short in meeting the high demand for immediate shelter. The private sector has made several initiatives to help address this need.

AES Philippines Power Foundation, in partnership with Habitat for Humanity, donated P5 million worth of disaster-resilient houses to 25 families in Kawayanville, Tacloban, who were affected by typhoon Haiyan. Each house can withstand winds similar to the strength of Haiyan or up to 250 km per hour. The houses, which were funded by the monetary contributions of AES employees globally, form part of a community that also includes a day-care center, sports facilities, and other amenities.

In Daanbantayan, Cebu, Republic Cement Services worked with Habitat for Humanity, too, to build affordable disaster-resilient houses for 74 families displaced by typhoon Haiyan. The housing units feature a hyperbolic paraboloid (hypar) thin shell concrete roof that can withstand wind speeds of up to 275 km per hour, a shotcrete wall system that prevents water and chemicals from seeping,
and an anchor system that can hold a house together against an intensity 8 earthquake.

Meanwhile, the Tabang sa Kabalayan (Homes as Help) project of Holcim Philippines provided housing to 100 families affected by typhoon Pablo in 2012. Designed by Green Architecture Advocacy of the Philippines, the new village was built in accordance with the company’s advocacy of sustainable construction. The houses were made out of hollow blocks and concrete roof tiles, materials which the company pioneered in New Bataan. Holcim also partnered with the Technical Education and Skills Development Authority (TESDA) in training 177 beneficiaries on skilled masonry. They were also trained on carpentry, welding, plumbing, and other construction-related skills, enabling them to build their own houses.

In Sara, Iloilo, Monsanto Philippines collaborated with Gawad Kalinga and invested P16.8 million to build 54 housing units for farmers whose houses were destroyed by Super Typhoon Yolanda and Ruby. A total of 232 families were given new shelters.

From 2010-2015, Sun Life of Canada Philippines, together with an implementing partner, helped build Legacy of Light Village as resettlement for families displaced by the rehabilitation of Pasig River. So far, 98 families now live in 115 two-story housing units inside a sustainable and green community with its own gym and learning center. The P49.3 million commitment which also gave TESDA-based skills training, support for livelihood initiative, and financial literacy reviews to encourage these families to start and manage their own businesses.
Cities serve as centers for economic development, commerce, science, culture, and human development. With more and more people now living in cities, more innovative approaches to affordable housing are needed for the millions of poor people that continue to live in slums and other informal settlements. The private sector may also look into investing in housing microfinance that cater to people with limited economic opportunities.

Acquiring an adequate and decent house should not be a burden and so government must take steps to enable the private sector to invest in low-income housing. The housing bureaucracy also needs to rationalize and urgently come up with measures related to post-disaster shelter and targeted housing subsidies for the people with disabilities, the elderly, indigenous people, women, and children.
SUSTAINABLE TRANSPORTATION FOR SOCIAL DEVELOPMENT
The transportation industry is an important contributor to employment and national development. According to the Japan International Cooperation Agency (JICA), the country’s productivity loss amounts to P2.6 billion per day due to the worsening traffic situation in Metro Manila alone. If left unchecked, the country will lose P6 billion per day by 2030. This amount does not include fuel wastages, other vehicle costs, and health costs, among other losses.

The efficient mobility of people, goods, and materials is clearly vital to the country’s social and economic development. Workers need to reach their offices in time for work. Goods need to reach their destinations in the shortest amount of time possible to enable profitable flow of trade, commerce, and finance.

Sustainable transportation requires lowering travel distances and reducing traffic congestion as much as possible. More importantly, it also seeks to reduce greenhouse gas emissions, air pollution, and health and safety risks arising from transportation. By doing so, people will spend less on transportation and other related expenses, waste less time moving from one place to another, and have more time instead for physical activity and social interaction.

In the Philippines, achieving sustainable transport will require a lot of work not just from the government but also from the private sector. According to the World Economic Forum’s Global Competitiveness Report 2016-2017, the Philippines ranked 112 out of 138 countries for quality of overall infrastructure.

Transportation accounts for 36% of total carbon dioxide emissions from fuel combustion. A JICA report states that greenhouse gas emissions are expected to increase to 5.72 million tons a year in 2030, compared to 4.7 million tons a year in 2012. More cars on the road mean more greenhouse gas emissions.

SDG 9 seeks to develop quality, reliable, sustainable, and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all. At the same time, SDG 11, which is focused on making cities inclusive, safe, resilient, and sustainable, seeks to provide access to safe, affordable, accessible, and sustainable transport systems for all by improving road safety and expanding public transport.

Businesses play a crucial role in realizing these sustainability goals. They have invested in providing affordable public transport with good intermodal connectivity not just in well-developed cities but in rural areas and low-income urban neighborhoods as well. They have collaborated with local governments to figure out future-ready mobility solutions and infrastructure, from lighting to transportation monitoring systems, which provide everyone with access to a range of resource-efficient, safe, and affordable transport options while minimizing impact to the environment.

City commuters need mass transit options that will not only decongest the city of cars, but also provide the riding public with better and more convenient mobility solutions. While public utility jeeps (PUJs) provide livelihood to numerous people, buses and trains that move a larger number of people should be made more widely available. Demand for mass transits in Metro Manila alone is expected to reach 7.4 million passengers per day by 2030.

Express or point-to-point (P2P) buses are now available in select parts of Metro Manila, providing commuters with a faster way to travel. P2P Premium Bus Service cuts travel time for those passing through EDSA by 20-30 minutes as buses do not make any stops along its route and depart according to a fixed schedule, not on whether the bus is full or not. The ride costs P20 more than ordinary city buses but riders attest that the convenience offered by P2P is worth the higher price tag. P2P, an initiative of the DOTC, LTFRB, and MMDA, together with Froelich Tours, RRCG Transport, and HM Transport, has successfully attracted a number of car users to shift to public transport.

Bonifacio Global City (BGC) Bus Transit System, meanwhile, ferries office workers and other people from a fixed terminal in Makati, which is along EDSA and near the MRT, to seven different points inside the new business district. Buses also depart according to a fixed schedule, ensuring that passengers arrive at their destinations on time.

At the Ninoy Aquino International Airport, Air21 and the Department of Transportation run UBE Express, a premium airport shuttle service that directly brings passengers to the Makati CBD, Roxas Boulevard, or Entertainment City. All of these buses are brand new Mercedes Benz MCV 120 units, which are designed to lower emissions and have speed limiters or sensors that prevent the buses from moving when their doors are open. This new fleet also showcase low entry doors and ramps to make them accessible to people in wheelchairs.

Global Electric Transport (GET) has been operating a fleet of zero emission, fully electric vehicles called the City Optimized Managed Electric Transport (COMET) in Quezon City since 2014. COMET is a 20-passenger vehicle that uses lithium ion batteries. It can travel up to 80 km on a full charge, with speeds capped at 60 kph. Fares are collected using stored-value cards, providing passengers the convenience of easily tapping in and out along Mindanao Avenue, Congressional Road, Luzon Avenue, and Katipunan Road. GET will be rolling out an all new fleet of airconditioned COMETs in the last quarter of 2017 that feature lithium titanate batteries that can be fully charged in 20 minutes and couple this with a QR code based mobile app ticketing and fare collection system for better passenger service.

Finally, Bemac Electric Transportation Philippines Inc. recently bagged a $30-million deal to produce 3,000 units of electric tricycles (e-trikes) under the joint project of the Department of Energy and Asian Development Bank. Shell Philippines for its part is doing the Shell Eco Marathon to challenge students to design ultra-energy-efficient vehicles.
INVESTING IN ADVANCED TRANSPORT SYSTEMS

With the advent of big data and modern ICT technologies come intelligent systems that speed up processes related to the transportation industry. In use now, for example, are innovative solutions, which automate collecting fare and other payments for the convenience of the riding public.

Beep is a reloadable contactless smart card designed to replace the magnetic card system used in Metro Manila’s three rapid rail lines (LRT1, LRT2, and MRT3). Developed and operated by AF Payments Inc., a joint venture of Ayala Corporation and Metro Pacific Investments Corporation (MPIC), Beep seeks to unify these rail lines through an Automated Fare Collection System. Further, the Beep stored-value card aims to reduce time spent queuing to buy tickets and to streamline train line transfers.

At the Cavite Expressway (CAVITEX), South Luzon Expressway (SLEX), and the Skyway, riders use Radio Frequency Identification (RFID) sticker tags to make cash-less and queue-less payments at toll stations. CAVITEX’s EasyDrive and the Auto Sweep RFID for SLEX and the Skyway use a sticker affixed to the front of a vehicle so that motorists pass through dedicated toll lanes with ease.

Meanwhile, at the North Luzon Expressway (NLEX), Easytrip Tag provides an interoperable service for the electronic payment of toll fees both in NLEX and Subic-Clark-Tarlac Expressway (SCTEX) and other merchants. Easytrip comes with a tap card that can be used to pay for merchant services on the road, such as restaurants, car parks, and gasoline stations using the same Easytrip Account.

IMPROVING ROADS AND OTHER TRANSPORT INFRASTRUCTURE

Good quality roads are a must for effective transportation. Metro Manila, for example, only has 1 km of road per 424 vehicles, which explains traffic congestion in high-density corridors. However, roads and other related infrastructure must be balanced to meet the needs not just of trucks and private car owners, but also of the public, particularly mass transit passengers, bikers, and pedestrians.

Ayala Land has also invested in developing integrated public transport terminals in all of its projects. All of its properties, including its malls, are at most two to three rides away from major hubs. For example, transit stops and public utility vehicle terminals serve an average of 10,500 daily commuters in its Cebu Holdings Inc. (CHI) estates.

Meanwhile, Manila North Tollways Corp. (MNTC) is building additional lanes in three major toll plazas along NLEX in order to speed up toll gate transactions in high-traffic exits. Similar initiatives are being undertaken through Public-Private Partnerships (PPP). These allow the private sector to finance the construction, operation, and maintenance of major infrastructure projects.

Some completed PPP projects include the Daang-Hari-SLEX Link Road, the Mactan-Cebu International Airport, and the NAIA Expressway Project (Phase II).
Overview of Completed and Ongoing PPP Projects

**Completed PPP Projects**
- Mactan-Cebu International Airport (MCIA) Passenger Terminal Building Project

**Awarded PPP Projects**
- Southwest Integrated Transport System (ITS) Project
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<tr>
<th>MRT Line 7</th>
<th>LRT Line 1 Cavite Extension and Operation &amp; Maintenance</th>
<th>Cavite-Laguna Expressway</th>
<th>Metro Manila Skyway (MMS) Stage 3</th>
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<tbody>
<tr>
<td></td>
<td>Daang-hari-SLEX Link Road (Muntinlupa-Cavite Expressway Project)</td>
<td>NAIA Expressway Project (Phase II)</td>
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## Completed PPP Projects

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<thead>
<tr>
<th>Project</th>
<th>Implementing Agency</th>
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</thead>
</table>
| Daang-hari-SLEX Link Road (Muntinlupa-Cavite Expressway Project) | DPWH                | Ayala Corporation (AC) Infrastructure              | • The 4-km toll road serves 24,000 vehicles per day, saving P219 million in fuel consumption and 889,000 in manhours valued at P139 million.  
• Reduced travel time 30-60 min from Daang Hari to Alabang  
• Relieved vehicular congestion in Muntinlupa, Cavite, and Las Pinas areas  
• Seamless interoperability between MCX and SLEX  
• Enhanced the competitiveness of CALABARZON Region as an investment destination  
• Over 500 jobs generated                                                                 |
| Mactan-Cebu International Airport (MCIA) Passenger Terminal Building Project | DOTr                | GMR Megawide Cebu Airport Corporation               | • Around 3,000 jobs generated during construction  
• Improved design capacity from 4.5M to 11.6M passengers per annum  
• Increased domestic destinations from 7 to 16  
• Increased international destinations from 22 to 27  
• Increased number of airlines from 11 to 19                                                                 |
| NAIA Expressway Project (Phase II)           | DPWH                | Optimal Infrastructure Development Corporation (SMC) | • Over 5,000 jobs generated  
• Reduced travel time from 24.3 minutes to 8.2 minutes  
• Ease of transfer between NAIA Terminal 1, 2, and 3  
• Better access to Skyway system, CAVITEX  
• Reduced traffic congestion of roads in the vicinity of the NAIA Terminals                                                                 |

## Awarded PPP Projects

<table>
<thead>
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<th>Project</th>
<th>Implementing Agency</th>
<th>Proponent</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>MRT Line 7</td>
<td>Department of Transportation (DOTr)</td>
<td>San Miguel Corp. (SMC)</td>
<td>The project involves the financing, design, construction, operation &amp; maintenance of the 23-kilometer elevated railway line with 14 stations from San Jose Del Monte, Bulacan to MRT 3 North Avenue in Quezon City and the 22-kilometer asphalt road from Bocaue Interchange of the North Luzon Expressway (NLEX) to the intermodal terminal in Tala.</td>
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## Awarded PPP Projects

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<tr>
<td>Metro Manila Skyway (MMS) Stage 3</td>
<td>Toll Regulatory Board</td>
<td>Citra Central Expressway Corporation (CCEC)</td>
<td>The project is a 14.82 km, 6-lane elevated toll road and the last of three (3) stages of Metro Manila Skyway (MMS) System. It is intended to connect South Luzon Expressway (SLEX) at Alabang to Balintawak in Quezon City before North Luzon Expressway (NLEX) through Central Metro Manila Area by using predominantly median of Quirino, G. Araneta and A. Bonifacio road networks. Among the key benefits of the project is the improvement of accessibility, mobility, and connectivity in and out of the metropolis via eight (8) strategically located interchanges.</td>
</tr>
<tr>
<td>LRT Line 1 Cavite Extension and Operation &amp; Maintenance</td>
<td>DOTr</td>
<td>Light Rail Manila Corporation (consortium of Ayala Corporation, Metro Pacific Light Rail Corporation and Macquarie Infrastructure Holdings)</td>
<td>The current LRT Line 1 will be extended starting from its existing Baclaran Station to the future Niyog Station in Bacoor, Cavite which is approximately 11.7 kilometers.</td>
</tr>
<tr>
<td>Cavite-Laguna Expressway</td>
<td>DPWH</td>
<td>MPCALA Holdings, Incorporated</td>
<td>The proposed expressway project aims to provide faster, safer, more comfortable and reliable route between Bacoor and Kawit, Cavite areas, and the Laguna and South Luzon Expressway (SLEX) areas; thus enhancing trade and socio-economic activities around them.</td>
</tr>
<tr>
<td>Southwest Integrated Transport System (ITS) Project</td>
<td>DOTr</td>
<td>Southwest Integrated Transport System (ITS) ProjectSouthwest Integrated Transport System (ITS) Project</td>
<td>The Southwest Terminal of the Integrated Transport System (ITS) project will be constructed within a site area of 4.59 hectares. It will connect passengers coming from the Cavite side to other transport systems such as the future LRT Line 1 South Extension, city bus, taxi, and other public utility vehicles that are serving inner Metro Manila.</td>
</tr>
<tr>
<td>Southwest Integrated Transport System (ITS) Project</td>
<td>DOTr</td>
<td>Ayala Land Incorporated (ALI)</td>
<td>The South Terminal of the Integrated Transport System (ITS) project will be constructed within a site area of 4.7 hectares. It will connect passengers coming from the Laguna/Batangas side to other transport systems such as the future North-South Commuter Railway project (currently the Philippine National Railways), city bus, taxi, and other public utility vehicles that are serving inner Metro Manila.</td>
</tr>
</tbody>
</table>
NON-MOTORIZED INITIATIVES

Business initiatives are less likely to be found in the transportation industry. Yet this is an industry that is profitable and has huge public impact. For example, there are economic opportunities that can be made in investing in non-motorized transport infrastructure such as walkways, safe footpaths, and bike paths. From a sustainable standpoint, such initiatives can reduce air and noise emissions, minimize greenhouse gas emissions, improve human health, create conditions for higher quality of life, and cultivate social equity.

As such, Ayala Land is putting pedestrians first in its estates, which is why all of its developments are fully interconnected, easy to navigate, and provide enough secured pathways for people to walk free from road-related harm or danger. Vermosa, a 700-hectare estate in Cavite with 60 hectares dedicated to public use, has a 14 km greenway and main roads with wide pedestrian lanes and 1.5-meter-wide bike lanes. Arca South has dedicated bike lanes and wide walkways, too, plus an integrated parking system. Recently acknowledged as the longest walkway in the Philippines, the Dela Rosa Elevated Walkway in Makati is a pedestrian bridge that directly connects to office buildings, retail establishments, shopping malls, and other key stops along the city’s main business corridor.

Gaps and Opportunities

Expanding access to affordable means of public transport with good intermodal connectivity and to a steady movement of goods and services will open up new market opportunities. These expansions can be coupled with innovations like bus rapid transport, automated fare collection, intelligent systems for traffic control, ride sharing and other on-demand services, and pooled freighting to facilitate cost-effective movement of goods.

Companies can also choose to anticipate future demand and initiate the production of vehicles and technologies that have low impact on the environment. This includes the development of next generation biofuels or creating modes of transport powered by renewable energy. Low-cost durable vehicles such as bamboo bicycles are suitable for use by people living in areas with poor rural roads.

Public education is one of the biggest challenges in the transportation industry. Stakeholders in the transportation industry should be encouraged to participate in developing solutions that promote the use of more sustainable modes of transportation.
Good corporate governance is a hallmark of an accountable, responsive, and transparent organization. According to the U.N. Global Compact: Guide to Corporate Sustainability, good governance does not only bring prosperity to shareholders, it also promotes financial, environmental, and ethical growth for more people in and outside the private sector.

Good governance also has the power to make companies more participatory and equitable, and thus also more effective and efficient. In the Philippines, the onus of formulating governance guidelines and monitoring corporate compliance falls on the Securities and Exchange Commission and the Philippine Stock Exchange.

Philippine companies that wish to pursue stronger governance initiatives may look into the ASEAN Corporate Governance Scorecard (ACGS) and the Integrity Initiative for initial reference and advice. The ACGS, introduced in 2011 by the ASEAN Capital Markets Forum and the Asian Development Bank, is one of the leading indicators of good corporate governance among publicly listed companies in ASEAN states. The Integrity Initiative, meanwhile, is a network of various companies that advocate good governance, transparency, and strong integrity measures in the Philippines.

In recent reports, both organizations reveal that an increasing number of Philippine companies are now aiming to increase their standards of governance. The ACGS noted 50 Filipino companies as among the region’s top-performing in 2014. In addition, more than 3,500 organizations in the country have signed the Integrity Initiative Pledge—a formal statement vowing to abide by ethical business practices and support a national campaign against corruption.

In this final section, we quickly survey some examples of outstanding good corporate governance practices, particularly with regard to inclusive decision making, accountability, transparency, ethical behavior, and corruption.
Female Leadership in the Top 1,000 Corporations in the Philippines

- **8.8%** of firms have female CEOs
- **88.1%** of firms have at least one female top executive
- **28.8%** of firms have at least one female board member
- **70.4%** of firms have at least one female management team member
- **15.5%** of firms have at least one female Chairpersons
- **6.9%** of firms have at least one female independent director
- **20%** of firms have at least one female top executive
The presence of more women and independent directors in the boardroom is one indicator of a healthy governance system in a company.

But out of the 24 companies surveyed that disclosed their ACGS, only 17 had a female member of the board, translating to one female board member for every 10 board members. Deloitte, meanwhile, found that women held only 7.4% of board seats in the Philippines in 2015. A study by Dumlao in 2014, however, found that boards in the country are comprised of 6.53 directors on average, two of whom are female. This places the local proportion of women directors at 31 percent, higher than the global average of 27%.

While these mixed results already appear promising, more must be done to promote female leaders in the corporate world. A study from MSCI ESG Research, Inc. revealed that companies that had strong female leadership generated a Return on Equity of 10.1% per year versus 7.4% for those without (on an equal-weighted basis). Companies lacking board diversity tend to suffer more governance-related controversies than average. Also, according to the Credit Suisse Research Institute’s biannual report “The CS Gender 3000,” companies that have at least three women on the board have three times higher market capitalization compared to those who only have one female representative. Yet in a recent survey conducted by KPMG R.G. Manabat & Co. among the top 1,000 corporations, very few were led by women. “Of the top 1,000, we contacted 770 and only 68 are led by women. Clearly there is a need for more. This was a disturbing statistic that drove us to pursue our advocacy for the advancement of women,” noted KPMG Vice Chairman and FCC Founding Member Sharon Dayoan.

SDG Targets Being Addressed

Achieve gender equality and empower all women and girls

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels

Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life

Promote the rule of law at the national and international levels and ensure equal access to justice for all

Substantially reduce corruption and bribery in all their forms

Develop effective, accountable and transparent institutions at all levels

Develop effective, accountable and transparent institutions at all levels
INCLUSIVE DECISION MAKING

The presence of more women and independent directors in the boardroom is one indicator of a healthy governance system in a company.

But out of the 24 companies surveyed that disclosed their AGCS, only 17 had a female member of the board, translating to one female board member for every 10 board members. Deloitte, meanwhile, found that women held only 7.4% of board seats in the Philippines in 2015. A study by Dumlao in 2014, however, found that boards in the country are comprised of 6.53 directors on average, two of whom are female. This places the local proportion of women directors at 31 percent, higher than the global average of 27%.

Our 2014 statistics on PSE-listed firms show that 8.8 percent of these firms have female CEOs, 88.1 percent have at least one female top executive, and around 28.8 percent of senior executives in a top management team are women. Moreover, we find that around 70.4 percent of firms have at least one female board member, around 15.5 percent of board members in a firm are women, around 6.9 percent of firms have female Chairpersons, and around 20 percent have at least one female independent director.

While these mixed results already appear promising, more must be done to promote female leaders in the corporate world. A study from MSCI ESG Research, Inc. revealed that companies that had strong female leadership generated a Return on Equity of 10.1% per year versus 7.4% for those without (on an equal-weighted basis). Companies lacking board diversity tend to suffer more governance-related controversies than average.

According to the Credit Suisse Research Institute’s biannual report “The CS Gender 3000,” companies that have at least three women on the board have three times higher market capitalization compared to those who only have one female representative. Yet in a recent survey conducted by KPMG R.G. Manabat & Co. among the top 1,000 corporations, very few were led by women. “Of the top 1,000, we contacted 770 and only 68 are led by women. Clearly there is a need for more. This was a disturbing statistic that drove us to pursue our advocacy for the advancement of women,” noted KPMG Vice Chairman and FCC Founding Member Sharon Dayoan.

INDEPENDENT DIRECTORS

Alongside the presence of more female leaders, having independent board members is another key factor to ensure inclusive governance processes. The presence of more independent board members reduces conflicts of interest among a company’s top advisors. Out of the 24 companies that disclosed their AGCS, 11 companies had a good proportion of independent directors in their boards, or around 50% of their board membership.
THE ABILITY TO UPHOLD ETHICAL STANDARDS AMONG COMPANIES IS A PRECONDITION TO AN INCLUSIVE AND EQUITABLE CORPORATE LANDSCAPE. AS NOTED IN THE PRINCIPLES OF CORPORATE GOVERNANCE OF THE OECD, A POPULAR GLOBAL BENCHMARK SINCE 1999, HIGH ETHICAL STANDARDS SHOULD BE APPLIED BY A COMPANY’S BOARD, TAKING INTO ACCOUNT THE INTEREST OF STAKETERS.

LIVING UP TO THIS IDEAL, MANY LOCAL COMPANIES ARE DEVELOPING AND DISCLOSING THEIR RESPECTIVE CODES OF ETHICS, WHILE CREATING MEASURES TO ENCOURAGE THE REPORTING OF UNETHICAL BEHAVIOR AMONG THEIR RANKS.

GLOBE TELECOM EXPRESSES ITS COMMITMENT TO PROPER BUSINESS CONDUCT THROUGH ITS EMPLOYEE HANDBOOK ON CODE OF CONDUCT AND ETHICS. THIS MANUAL, DETAILING VARIOUS POLICIES ON ETHICS, COVERS ALL REGULAR EMPLOYEES, OFFICERS, AND DIRECTORS OF GLOBE AND ITS SUBSIDIARIES. PROJECT HIREs, CONSULTANTS, AND OTHER PERSONNEL THAT ARE NOT CONSIDERED AS REGULAR EMPLOYEES, ARE ALSO TASKED TO FOLLOW THE CODE.

FOR ITS PART, ENERGY DEVELOPMENT CORPORATION COMMUNICATES ITS ACTIVITIES PERTAINING TO ETHICS IN ITS CORPORATE GOVERNANCE REPORT, ANNUAL DISCLOSURES AND REPORTS, AND THE COMPANY’S FORM 17-A, WHICH IT SUBMITS TO THE SEC.

ABOITIZ, MEANWHILE, HAS A CODE OF ETHICS AND BUSINESS CONDUCT WHICH HAS BEEN IN PLACE SINCE 2002. THIS CODE APPLIES TO ALL REGULAR EMPLOYEES AND SUMMARIZES ABOITIZ’S FUNDAMENTAL POLICIES AND DIRECTIVES ON ABIDING BY ETHICAL STANDARDS.

ACCOUNTABILITY AND TRANSPARENCY

Companies that are truly accountable and transparent are able to provide the necessary information that engages stakeholders to make informed decisions and participate in key decision-making processes.

Having a separate CEO and Chair of the Board is now widely acknowledged as a good governance practice as it strengthens the objectivity of the board and promotes its ability to think independently from management. This in turn brings about greater accountability and transparency, as vital decisions are not held by a homogeneous few.

A review of recent ACGRs reveal that having a separate CEO and Chair of the Board is a growing trend, with 18 out of 24 companies following this route. In addition, proper auditing practices and mandatory guidelines to promote integrity and transparency in Related Party Transactions are being upheld among this group.

Different persons assume the roles of chairman and CEO

75% 25%

YES NO

ETHICAL AND LAWFUL BEHAVIOR

The ability to uphold ethical standards among companies is a precondition to an inclusive and equitable corporate landscape. As noted in the Principles of Corporate Governance of the OECD, a popular global benchmark since 1999, high ethical standards should be applied by a company’s board, taking into account the interest of stakeholders.

Living up to this ideal, many local companies are developing and disclosing their respective Codes of Ethics, while creating measures to encourage the reporting of unethical behavior among their ranks.

Globe Telecom expresses its commitment to proper business conduct through its Employee Handbook on Code of Conduct and Ethics. This manual, detailing various policies on ethics, covers all regular employees, officers, and directors of Globe and its subsidiaries. Project hires, consultants, and other personnel that are not considered as regular employees, are also tasked to follow the code.

For its part, Energy Development Corporation communicates its activities pertaining to ethics in its Corporate Governance Report, annual disclosures and reports, and the company’s Form 17-A, which it submits to the SEC.

Aboitiz, meanwhile, has a Code of Ethics and Business Conduct which has been in place since 2002. This code applies to all regular employees and summarizes Aboitiz’s fundamental policies and directives on abiding by ethical standards.
BATTLING CORRUPTION AND UNETHICAL PRACTICES

The ASEAN Corporate Governance Scorecard considers bribery, fraud, extortion and money laundering, as well as collusion and conflict of interest, as corrupt practices and detrimental to longstanding corporate growth. As such, the scorecard places a high premium on corporate policies pertaining to fighting corruption and whistle-blowing.

Based on recent surveys, the solicitation of bribes from private companies appear to be dropping steadily. The SWS Enterprise Survey on Corruption reached a record low in 2013 when only 44 percent of business people surveyed said that they were actually asked to participate in bribery. While still high, this figure already marked a considerable improvement from 2012’s 50 percent and 2009’s 60 percent.

Further, a study by Ernst and Young showed that 72 percent of Filipino employees say their respective organizations would support whistle-blowers. About 37 percent of those surveyed also indicated their reluctance to use a whistle-blowing hotline, saying they are concerned over its confidentiality and ability to fully protect them legally.

In JG Summit Holdings, employees are encouraged to communicate any knowledge of illicit activities through the reporting channels of its Conflict of Interest Committee. The company has policies that cover business conduct, whistle-blowing, and conflict of interest, among other areas. New employees are oriented on these policies and are given periodic reminders to abide by these guidelines.

Energy Development Corporation strictly prohibits unethical and corrupt practices. According to the company, “management is primarily responsible in overseeing the efficiency of its anti-corruption programs, which go beyond detection and prevention of fraud and other corrupt practices.” The company’s whistle-blower policy, called the Protected Disclosure Policy, enables not only employees and shareholders, but also customers and the public at large, to report issues involving illegal and questionable activities or omissions, unethical behavior, fraud and other malpractices.

Globe, meanwhile, defines its procedures for acting on illegal and unethical behavior in its Code of Conduct and Ethics. The company’s whistle-blowing channels are easily accessible to any person using the hotline number and email address.

FOSTERING A CULTURE OF INTEGRITY

In signing the Integrity Pledge, companies formally express their commitment to abide by ethical business practices and support a national campaign against corruption. They are also urged to take an integrity self-test not only to reveal areas of corruption that they are most susceptible to, but also to create measures that directly address these vulnerabilities.

Since 2010, more than 3,500 parties, including government agencies, have already signed the Integrity Pledge. This figure, however, only represents a small fraction of the estimated 670,000 groups registered with the SEC, as well as the over 40,000 local government units in the country.

There is a need to promote greater private sector participation in networks like the Integrity Initiative, as the highest levels of integrity are key to a truly sustainable society and environment. This need becomes more crucial given the continued perception and actual reports of corrupt practices in the government.

To address this systemic problem, the Integrity Initiative believes curbing poverty must be done in both the public and private sectors simultaneously. According to the group, doing so would help regain public trust in both parties and propel the country to greater economic growth. They likewise urge corporate leaders to lead by example and clearly communicate policies against bribery and other illicit activities.

According to the American Chamber of Commerce’s Integrity Handbook, four of the best examples of outstanding integrity practices in the Philippines are those managed by the Manila Electric Company (Meralco), Manila Water, SEAOIL, and Punongbayan & Araullo.
DEMANDING INTEGRITY, DIVERSITY, AND TRANSPARENCY OF LEADERSHIP

Good governance practices attract the right people, enlarge foreign investments, and ultimately lead to a more sustainable company. As such, stakeholders must demand the highest levels of good governance from their top executives and board members.

While the foundations for strong governance measures are already in place in the Philippine private sector, a good deal of work remains to be done, particularly when dealing with the government, to fill in gaps that threaten to undermine advances already made.

In terms of corruption, for example, many Philippine companies still do not have a categorical policy on dishonest and fraudulent conduct involving money or bribery. The Integrity Initiative also found that there is “no consensus on the range of acceptable practices in giving gifts and other tokens of hospitality” to government officials. These grey areas most likely affect smaller companies that do not have the mettle or clout to fight bribery in both public and private spheres.

In terms of transparency, companies should be mandated to reveal the scores or findings of the ACGS and Integrity Initiative on their respective websites and reports. This will greatly help investors and internal stakeholders in assessing a company’s level of maturity in terms of governance. It can also motivate corporate leaders to become more conscientious and accountable in dealing with the government or managing their supply chains.

Given these gaps, new linkages between the private sector and the government can be formed to further fight bribery and other forms of corruption that have already become systemic in many organizational cultures.

Other measures that are ripe for development include the creation of national integrity summits or awards that will push more companies to join integrity and transparency networks. The evaluation committee of SEC should likewise be strengthened to ensure that companies with strong integrity measures are properly recognized. Further, the SEC should encourage companies to disclose their ASEAN Corporate Governance Scores for the easy access of investors and the business media.

Finally, diversity in boardrooms and at the top levels of management should be encouraged to develop a corporate landscape that is inclusive and truly speaks on behalf of the needs of all stakeholder groups.
The Road to 2030

Despite rapid economic growth across the globe, persistent development problems continue to negatively impact millions of lives.

Social exclusion and inequities. The threat of climate change. Lack of access to public services and infrastructure. Environmental degradation. These are just some of the enduring challenges that the Sustainable Development Goals aim to finally resolve by 2030.

Given the comprehensive nature of the SDGs and the massive scale of their ambition, the private sector’s contribution has become indispensable to our collective cause. According to the U.N. Secretary General Ban Ki-moon, we need to activate business as never before: “We are spreading the word far and wide that every business has a responsibility to improve our world.”

WHAT THE PRIVATE SECTOR CAN DO

Integrate the SDGs into business. Companies must now recognize the need to incorporate the SDGs into their core business strategies. This will entail developing new business concepts and transforming philanthropic and CSR programs into actual business models that deliver value both for society and the company.

Collaborate. An openness to collaboration and a strong spirit of inclusion have become essential for doing good business today. Companies can reach a wider market base and achieve value at scale by partnering with other companies, as well as the government and civil society groups.

Prioritize under-served areas. In partnership with the government, companies can significantly address regional disparities and inequities through target-based solutions that also bring in profit for shareholders. This could be achieved by re-allocating resources to under-served municipalities and growing them into stronger markets, thereby enabling them to deliver substantial returns on investment later on. This could also unclog urban centers and allow the smoother and equitable flow of wealth into other locales.

Invest in monitoring and reporting. Several internationally accepted sustainability reporting frameworks are now in place to guide companies in aligning their key business strategies with developmental goals. These include the UN Global Compact and the Global Reporting Initiative, among other frameworks.
Embed the SDGs across the value chain. Businesses should also integrate the SDGs not only within their operations, but also across their entire value chains. By doing so, the private sector can spread its influence from upstream suppliers and industries down to consumers and end-users.

WHAT THE GOVERNMENT CAN DO

Engage the private sector. It is critical to engage the private sector in development planning and implementation. Although local government units and other state agencies are at the forefront of services delivery, establishing synergies with the private sector could introduce efficiencies and innovations, and enlarge the impact of public services.

Encourage private sector participation. To inspire more companies to help in development, the government can create an enabling environment through fiscal measures, regulatory policies, and legislative changes. Only 42% of businesses, for instance, engage with policy-makers. While the need for businesses to focus on their customers and the bottom-line are obvious priorities, it is also critical that policies are developed with input from businesses.

WAY FORWARD

The United Nations Development Programme and the Philippine Business for the Environment are implementing the SDGs is Our Biz project.

Complementing the SDGs Portal and this annual publication, SDGs is Our Biz will be a landmark effort to guide enterprises in integrating the Global Goals into their business models and CSR initiatives.

The project will create ways for the private sector and the government to follow evidence-based decision-making processes, share best practices, and create knowledge among companies, the government, and other key stakeholder groups. It also seeks to standardize SDGs reporting across the entire private sector.

Please contact UNDP or PBE to know more about the project and what we can do to get you started on your journey towards heightened entrepreneurship and sustainable development.
The United Nations Development Programme, in partnership with the Philippine Business for the Environment, launched the SDGs online portal on 8 September 2016.

The SDG online portal (http://sdgreport.thepbe.org), is an online platform where companies provided data and other information on their initiatives that contribute to the SDGs. A list of business initiatives contributing to the SDGs and pre-filled form was made accessible and downloadable for the reference of companies submitting their initiatives.

Companies were requested to fill-up the Project Information Form which includes questions on project overview, key results and impacts, and other project details.

Based on the submissions, the criteria for inclusion in the report are as follows:

- Completeness of data
- Alignment of the initiative with the SDG targets
- Scale of resulting output of reported initiative which contributes largely to society
- Innovative approaches identified

It is worth noting that the investments data in this report are based on disclosed investments submitted in the SDG online portal and varies in terms of timelines. The investments data provided were aggregated to capture (1) the total amount of the reported investments and (2) the total amount of disclosed investments per primary SDG which the initiative targeted. However, please note that these amounts do not encapsulate the entirety of the investments of the reported initiatives and the contributions of the private sector.
# Annex 2

## LIST OF REPORTED INITIATIVES
### VOLUNTARILY SUBMITTED IN THE SDG PORTAL

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<tr>
<th>SUB-SECTION</th>
<th>COMPANY</th>
<th>INITIATIVE</th>
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<td>Aboitiz Equity Ventures</td>
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<td>Pacific Paint (Boysen) Philippines, Inc.</td>
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<td>Monsanto Philippines, Inc.</td>
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## Annex 3

### LIST OF REPORTED INITIATIVES SOURCED THROUGH DESK RESEARCH

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| Coco Technologies Corporation | 3.3         | **Core business**  
| Easytrip Services Corporation | 4.5         | **Easytrip and Easydrive**  
| Gandang Kalikasan's          | 2.1         | **Core Business Employment Practice**  
| GET Philippines              | 4.5         | **COMET**  
| Globe Telecom                | 1.2         | **Konsulta MD**  
| Globe Telecom                | 1.3         | **Global Filipino School**  
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| Globe Telecom              | 2.1         | **Globe MyBusiness; Gcash**  
| Globe Telecom              | 3.1         | **Project1Phone**  
| Globe Telecom              | 3.2         | **Disaster and Climate Change Response (ASSIST)**  
| Globe Telecom              | 3.3         | **ICT Infra for Up-Scaling Forest Restoration Efforts in Key Biodiversity Areas**  
| Globe Telecom              | 4.3         | **Core business**  
| Glovax Biotech Corporation | 1.2         | **Core Business**  
| Holcim Philippines, Inc.   | 4.4         | **Homes as Help**  
| Hybrid Social Solutions, Inc. | 4.2     | **ACCESS Program**  
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| Nestle Philippines      | 3.1         | Greening the Supply Chain  
| Nestle Philippines      | 3.2         | Switching to Cleaner Fuels  
| Nestlé Philippines      | 1.1         | Nestlé’s Micronutrient Fortification program and Nestlé Healthy Kids  
| Nestlé Philippines      | 1.1         | Gender Empowerment  
| Nestlé Philippines      | 3.1         | Good Water Principles in action  
| One Meralco Foundation  | 4.2         | Community Electrification Program  
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<td><strong>Project Inclusion</strong>&lt;br&gt; Project Inclusion (n.d.) Unilab Foundation Website. Retrieved from <a href="http://www.unilabfoundation.org/ULFWeb/6/program/project-inclusion">http://www.unilabfoundation.org/ULFWeb/6/program/project-inclusion</a></td>
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