CHASING
THE WIND

THE SUN

AND THE RIVER

THE STORY OF

alternergy

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Alternergy Holdings Corporation
2024

CHASING THE WIND, THE SUN, AND THE RIVER

The Story of Alternergy

Author: Yasmin Arquiza
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To our families, who have been part of our journey,
and to our children and grandchildren,
to whom we hope to leave a sustainable future.

Acronyms

ADB	Asian Development Bank
AIFFP	Australian Infrastructure Financing Facility for the Pacific
BDO	Banco de Oro Unibank
BOI	Board of Investments
CAAP	Civil Aviation Authority of the Philippines
CEPALCO	Cagayan Electric Power and Light Co.
DAR	Department of Agrarian Reform
DBP	Development Bank of the Philippines
DENR	Department of Environment and Natural Resources
DMHC	Dupinga Mini Hydro Corporation
DOE	Department of Energy
ECC	Environmental Compliance Certificate
ERC	Energy Regulatory Commission
FPIC	Free and Prior Informed Consent
GEA	Green Energy Auction
ICCP	Investment & Capital Corporation of the Philippines
IFC	International Finance Corporation
IPO	Initial Public Offering
KMHC	Kiangan Mini Hydro Corporation
NCIP	National Commission on Indigenous Peoples
NGCP	National Grid Corporation of the Philippines
NREB	National Renewable Energy Board
PPUC	Palau Public Utilities Corporation
PSE	Philippine Stock Exchange
RCBC	Rizal Commercial Banking Corporation
RE	Renewable energy
SEC	Securities and Exchange Commission
TransCo	National Transmission Corporation
WB	World Bank
WWF	Worldwide Fund for Nature

Foreword

REPUBLIC OF THE PHILIPPINES

Department of Energy

(KAGAWARAN NG ENERHIYA)

Congratulations to Alternergy Holdings Corporation for this noteworthy book on renewable energy in the Philippines.

The stories in these chapters recount the challenges as well as the critical accomplishments of independent power producers that are contributing to the goal of self-reliance and sustainable energy for the country. With its focus on three sectors — wind, solar, and hydro — Alternergy has shown that investors can strive to balance the pursuit of profits with caring for the planet.

The government has seen a positive response from local and foreign investors that are keen on developing the renewable energy potential of the Philippines. We are working on policies that will streamline government processes for clean energy investments. One of the promising technologies we have seen recently are offshore wind installations that would bring cutting-edge technology to the country, enhance livelihood opportunities for coastal host communities, and protect our marine environment at the same time.

With the passage of Republic Act No. 9513 or the Renewable Energy Act, companies have enjoyed income tax holidays, duty-free importation, and tax exemption of carbon credits. This year, the Board of Investments has announced that around 80 percent of the projects that have been approved are renewable energy.

The government is aware that connectivity is the core of renewable energy, and transmission is key for connecting sources of electricity to the market. A comprehensive review of the performance of the National Grid Corporation of the Philippines as the franchise holder for the transmission system in the country is underway to pinpoint the obstacles and look for solutions in addressing significant delays in the completion of transmission projects. We are aiming to address this critical issue in the near future for the benefit of the country's energy producers and consumers.

Much more awaits to be done and the role of the government is to support the initiatives of the private sector. We are committed to the pursuit of sustainable, stable, secure, accessible, and reasonably priced energy for Filipinos. We will continue to work on long-term solutions to develop indigenous and renewable sources of energy that will meet the country's targets in addressing the climate crisis. We are grateful for the contributions of Alternergy led by former Energy Secretary Vince Perez to our national goals toward a self-reliant and climate-friendly future for our country.

Raphael P. M. Lotilla
Secretary of Energy

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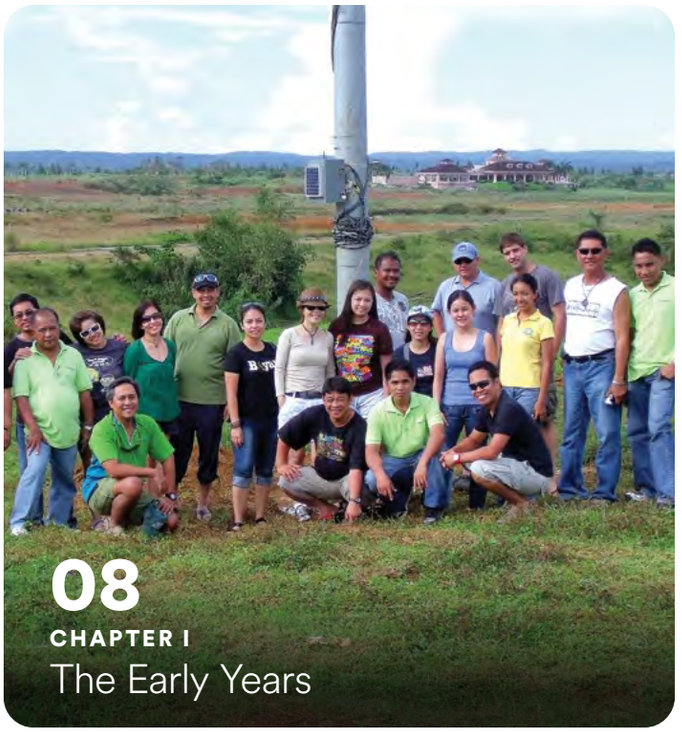

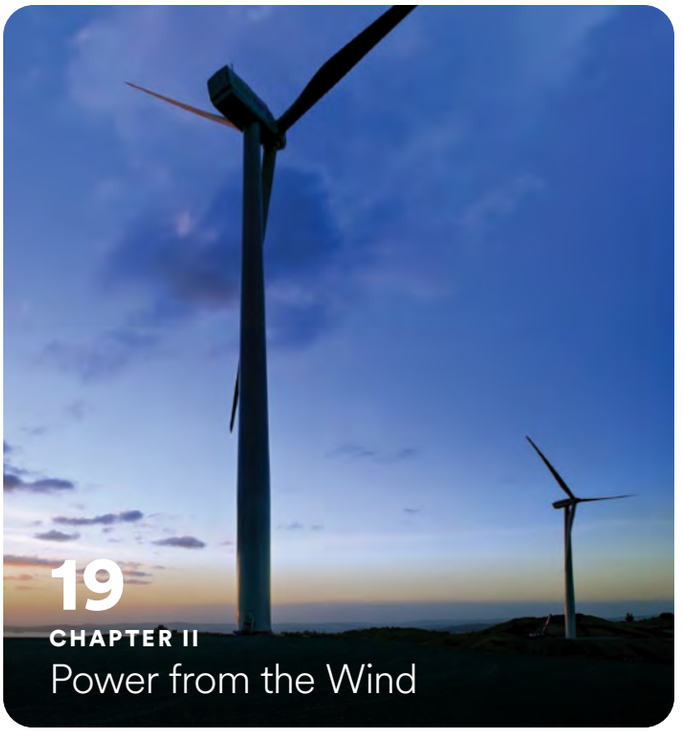

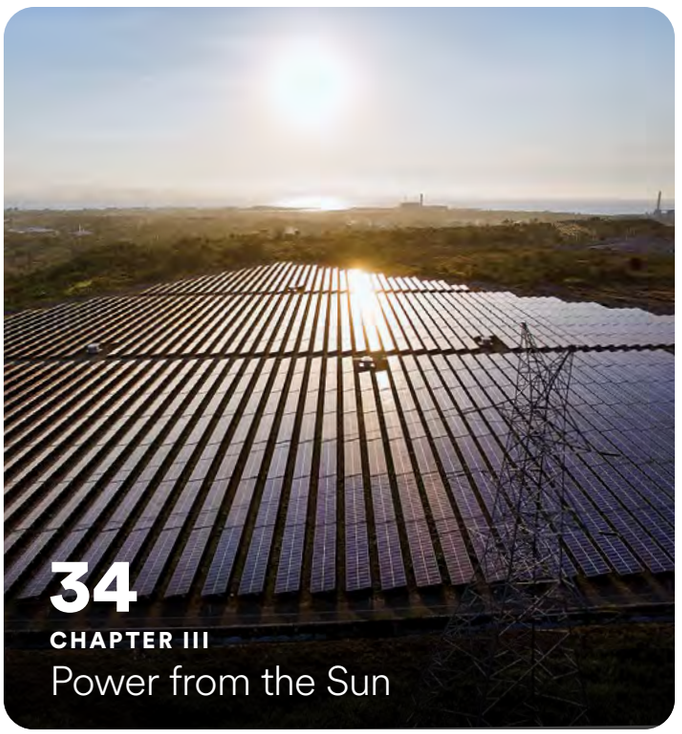

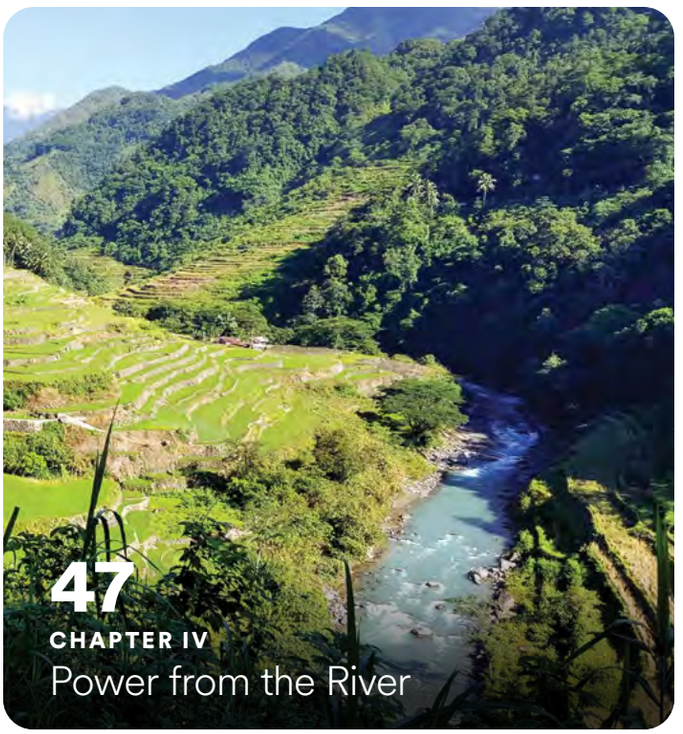

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Chapter 1

The Early Years

> In a fortuitous turn of events, the landmark Philippine Renewable Energy Law was signed on December 16, 2008, a vital piece of legislation that had a significant impact on the growth of Alternergy.

In the summer of 2005, Vicente "Vince" Pérez, Jr. faced a crossroads. A passionate environmentalist and former investment banker, he would soon embark on a sabbatical at Yale University after stepping down from a fruitful stint at the Department of Energy. He was not quite sure what he wanted to do next.

At the time, Vince had business interests in sustainable tourism and seafood processing. His family had an island in Palawan that he frequented as an avid scuba diver, he was dedicated to the protection of coral reefs, and he was actively supporting the World Wide Fund for Nature (WWF).

Vince turned to his personal life coach, Singaporean Anthony Tan, whom he met at a workshop when he was Energy Secretary, and over multiple sessions, took self-values and psychometric tests to help make a decision. "He felt that my love for the environment plus four years as Energy Secretary shouldn't be wasted, and that, given my entrepreneurial background and my experience with banking deals, I should set up my own business in the nexus of energy and environment which is renewable energy," Vince says.

With this sage advice in mind, Vince embarked on a journey that would take him from boardrooms to classrooms, from windswept ridges to raging upland rivers, and from sun-soaked idle lands to scenic islands in the Pacific Ocean that would test his mettle in the next two decades of his life.

As the youngest Energy Secretary the Philippines has ever had, serving the administration of President Gloria Macapagal-Arroyo from June 2001 to March 2005, Vince already had a head start in the power industry. During his time in office, he promoted local sources of clean energy such as natural gas that could wean the country away from expensive and imported fossil fuels, boosting energy self-sufficiency from 45% in 2000 to 56% in 2004. He set an ambitious goal to make the Philippines the world's largest geothermal power producer, with its abundance of volcanoes and strategic location in the Pacific rim of fire. He also wanted the country to become Southeast Asia's wind powerhouse, because of its mountainous terrain and thousands of islands exposed to the monsoon winds.

Vince kept these goals in sight when he decided to do an in-depth study on renewable energy in emerging countries as a Yale World Fellow. He traveled to Mexico, India, and Turkey to understand their renewable strategies, then wrote a lengthy business case thesis on the topic which he completed in May of 2006. Vince handed the report to the fellowship director, who found it interesting, but then, "literally I saw his hand place my entire year's research into a bookshelf. And I thought, oh my, it's just going to sit there on a shelf and collect dust! I asked the program director to let me make an extra copy for myself." In the fall of 2006, and on the strength of his research, Vince was invited to teach a special MBA course at the Yale School of Management on Investing in Renewable Energy (Mgt 893) to 23 graduate students, one of whom would later become his business partner.

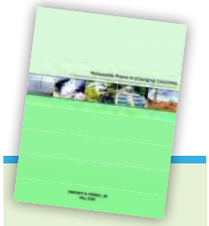
May 11, 2006: Vince in Huatulco, Mexico wind farm as part of his Yale research

◂ **November 2005** Vince Pérez (left most) as Yale World Fellow giving a talk at Yale University, New Haven, Connecticut

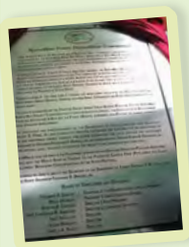
His seminal paper on justifying a *"Business Case for Investing in Renewable Energy in Emerging Countries"* became pivotal to the company Vince would later establish with other co-founders upon his return to the Philippines at the end of 2006. At the time, he had a consulting firm called Merritt Partners that he set up after leaving government in 2005, with ex-DOE colleagues led by former DOE Undersecretary Jocot de Dios, now president of Manila Water. One of their clients was NorthWind Power Development Corporation, which established the Bangui Bay Wind Farm in Ilocos Norte. "The founders, led by Neils Jacobsen and Chito Dumlao, were running short of cash. They needed a cash injection of PhP58 million," Vince says. "I reached out to my virtual Rolodex." Vince's contact list is a compilation of personal networks cultivated over three decades. His partners are always amazed at how extensive his network is, that there is always someone for something they need to do.

Vince called his contacts in Japan and Singapore, and even though they were interested, these were publicly listed companies that would take some time to decide because they have to go through the proper due diligence. But NorthWind urgently needed the cash injection. "So I finally said, you know what, I'll just invest myself." With savings from his investment banking years, on August 15, 2006 (which happens to be his parents' wedding anniversary), Vince put in cash for an 8% equity stake in NorthWind and brought in BDO Capital, through Nestor Tan and Ed Francisco, to acquire another 17% so together they had a 25% stake. "That's how I first got involved in renewable power, through that investment in NorthWind," Vince says.

Aside from Knud Hedeager, formerly a senior vice president at NEG Micon, the company that supplied the wind turbines for the Bangui project, another original investor in NorthWind was Poch Ambrosio, a lawyer and Vince's former chief of staff at the Department of Energy who introduced NorthWind to him. The pioneering wind farm was the first in Southeast Asia and Vince and Knud wanted to grow the business further, but the other directors were content to stick with the NorthWind project. Vince and Knud asked them if they could form another enterprise to explore more wind project options. After getting their blessing, Vince and Knud teamed up with Poch to form a new company that they named Alternergy, a portmanteau of alternative energy.



▲ Cover page of Vince Pérez' 118-page research thesis on "A Business Case for Investing in Renewable Power in Emerging Countries," completed May 30, 2006



▲ Plaque at Bangui Bay wind farm of NorthWind Power, with Knud Hedeager and Jose Ildebrando Ambrosio's names as directors. Recently resigned Energy Secretary Vince Pérez was a guest at the inauguration on June 18, 2005

As a corporate entity, Alternergy has gone through several iterations. It was first incorporated as a management company called Alternergy Holdings Pte Ltd in Singapore on December 15, 2006. Knud joined Vince in January of 2007, while Poch followed suit in May. "We felt we needed a strong finance guy," Vince says, and so they recruited Gerry Magbanua, an accountant with the global power developer InterGen, who joined them in June and later also served as CFO of NorthWind. Vince also asked his friend Kristen Quintos, a former banker, to handle corporate governance in the new venture. The company was renamed Alternergy Partners Pte Ltd. in January 2007 with the goal of turning the business plan hatched in Yale into a thriving enterprise, and with an initial investment of $250,000 from Vince. "I figured that would be enough to pay the allowances of my co-founders and our travel and legal expenses," he says.

At first, Alternergy functioned like a client of Merritt Partners, which served as the administrative office of the start-up with support from Lea Ricolcol, Gladys Policarpio, Sandra Nepomuceno, Vangie Moises and Wheng Olano; the latter three would later join Alternergy. "Four founders would squeeze into a tiny little office corner no bigger ▸

▲ **July 2008:** NorthWind board meeting of Vince, Gerry, Knud, Poch with Niels Jacobsen and Chito Dumlao

1 Knud Hedeager, Poch Ambrosio, and Gerry Magbanua at temporary office at Merritt Partners

2 May 28, 2007: Prospective investor Temasek visit to Bangui Bay wind farm

than a bar table. Our elbows were touching each other," Knud says.

After one year, Kristen left the team to head a bank. Meanwhile, the other founders got busy going on fundraising roadshows to financial capitals including New York, Stamford, Singapore, London and Dubai. They had discussions with a sovereign wealth fund, a global energy company, and a local conglomerate. Vince and Gerry even flew to Morocco to meet a Middle East investment fund. They also tried lining up a pipeline of projects, from wind and geothermal projects in the Philippines, to wind and hydro in India and even a biomass project in Vietnam. "We felt that having a project pipeline was the hook for us to get large institutional investors. Sadly, none of those came to fruition," Vince says. "But then what happened next? The global financial crisis of 2008!"

In mid-September 2008, the US investment bank Lehman Brothers filed for bankruptcy following the collapse of several US banks because of distressed housing mortgages, triggering a massive recession that affected multiple countries, including the Philippines. Vince and his partners found it hard to raise money because they did not have any solid project, only what he called a "business plan on paper."

By the end of 2008, and without a clear investor in sight, Vince was ready to throw in the towel. His co-founders were working without a salary and he had to defer his allowance because funds were running low. Vince told Knud, Poch, and Gerry that they were welcome to leave the company if they wanted to go back to their old jobs. Fortunately, the three stayed on and together, they decided to pivot away from the company's ambitious plan of developing a Pan-Asian portfolio. Instead, they would focus on the Philippines and wind energy, on which the founders already had a track record with the Bangui wind farm.

Knud recalls those early years as an uphill battle, but the team was unfazed. "It was a financially rough time but we just plowed ahead. We had an advantage as first movers, and Vince has a really good local network. The renewable energy industry was quite strong and less affected by the economic crisis compared to other sectors. The Philippines has a good potential for wind power so the struggles did not really discourage us," he says.

Gerry, who was part of the team chasing potential investors, felt the same way. "I believed in what we were trying to do. I believed in our collective ability to see this through," he says. "If I give up, I'm giving up on myself."

"Those were heady, hectic days, building up the project pipeline while searching for a strategic partner. At the same time NorthWind was completing an expansion in August 2008," recalled Poch. "Even while we seemed to be hitting obstacles at every turn, everything we'd heard from ▸

3 November 12, 2007: Alternergy founders on a fundraising roadshow in New York

4 January 29, 2008: Alternergy team with prospective investor First Reserve in Bangui Bay

5 August 2008: Alternergy on fundraising roadshow in Dubai, one month before the Global Financial Crisis

our roadshow gave us confidence that we'd find our strategic partner sooner rather than later."

In a fortuitous turn of events, the landmark Philippine Renewable Energy Law was signed on December 16, 2008, a vital piece of legislation that had a significant impact on the growth of Alternergy. Vince had been a resource person during the congressional deliberations, advising legislators on how to promote renewable power investments. "I was sharing with the legislators everything I learned at Yale about what a renewable energy law should have — you need feed-in-tariff, you need renewable portfolio standards, you need priority dispatch, all the policy instruments I learned," he says. In his business plan, Vince had noted that some of the most significant barriers to developing renewable energy in emerging countries were the lack of policy and regulatory frameworks, lack of financial incentives, and lack of awareness about the potential of renewable energy.

INQUIRER.NET

DOE awards 3 wind power contracts

By Abigail L. Ho
January 04, 2009

MANILA, PHILIPPINES – The Department of Energy (DOE) has awarded three pre-commercial windpower development contracts to Alternergy Philippine Holdings Corp., a local firm identified with former Energy Secretary Vince Pérez.

6 December 16, 2008: Alternergy was present in Malacañang during the signing of the Renewable Energy Law

7 May 30, 2009: Vince joined a state visit to South Korea with Philippine President Gloria Macapagal Arroyo

8 May 30, 2009: Meeting Energy Secretary Angelo Reyes with East West Power officials Gil Gul Lee and Sang Rok Kim

9 June 2009: Due diligence session with East West Power and Eurus Energy with Sycip Salazar at Ayala Tower

The new law got the attention of foreign investors, who welcomed the enabling legislation that would support the growth of the renewable energy industry in the Philippines. The tide soon turned in Alternergy's favor. Two weeks after the law was signed, the Department of Energy awarded the company three pre-commercial contracts to explore wind resources in the provinces of Rizal, Laguna, and Mindoro Occidental. Boosted by incentives from the new legislation, in early 2009 Alternergy attracted two strategic partners, East West Power of South Korea and Eurus Energy of Japan, who expressed interest in wind projects in the Philippines.

After setting aside their dream of going on a pan-Asian scale, the co-founders closed down the company in Singapore and created a new company in the Philippines that would reflect their focus ▸

philstar GLOBAL

Alternergy partners with Japanese, Korean firms

By Donnabelle L. Gatdula
Updated September 11, 2009

MANILA, PHILIPPINES – Alternergy Philippine Holdings Corp. (APHC) yesterday announced it has formed a joint venture with Eurus Energy Japan Corp. and Korea East West Power Co. (EWP) to develop renewable power projects in the Philippines.

MANILA BULLETIN

3-country joint venture forays into RE

Manila Bulletin, 2009

LOCAL FIRM Alternergy Philippine Holdings Corporation has sealed tie-up deals with Eurus Energy Japan Corporation and Korea East West Power Co., signaling their plunge into development of renewable energy projects in the Philippines.

on wind energy. On Rizal Day, June 18, 2009, El Viento Partners Corporation was registered with the Securities and Exchange Commission, the name playing on the Spanish word for wind (*viento*) and the initials of Vince, which he found corny but he had to relent to it because of their foreign partners' insistence that they needed a "Vince Pérez Company." After all, they had invested in the project on the strength of the reputation of Vince as a trustworthy and reliable partner. (El Viento was later renamed Alternergy Viento Partners Corporation in 2010, and finally, to Alternergy Holdings Corporation in 2017.)

El Viento became the vehicle for the Alternergy co-founders' financial interest in a joint venture called Alternergy Philippine Holdings Corporation, which was formed in August 2009 together with their foreign partners. Vince remembers negotiating heavily with the Japanese and Koreans for a token closing fee of $250,000 so that he could pay back his team and recover his initial investment. He also negotiated for 10% of the company's shares to be given to El Viento as free shares. "We struggled a lot. Others could have folded, others could have fought and argued and split, but despite one person resigning, we were still together," Vince says.

One of the factors that convinced the foreign investors to finance the joint venture was the appointment of Vince as vice-chairman of the National Renewable Energy Board, which would draft the implementing rules for the renewable energy law. "The Koreans and the Japanese were very cautious, but they realized that we have a lot of clout and they were tying up with the right partners," Gerry added. ▶

GMA NEWS ONLINE
LATEST NEWS FROM THE PHILIPPINES AND AROUND THE WORLD

Japan, Korean investors infuse $100M in renewable energy

September 10, 2009

ALTERNERGY Philippine Holdings Corp., founded by former Energy Secretary Vincent Pérez, formed a joint venture with Korean and Japanese investors to develop renewable power projects in the country.

▶ **September 14, 2009:** Vince taking oath as vice-chair of National Renewable Energy Board

REPUBLIC OF THE PHILIPPINES
SECURITIES AND EXCHANGE COMMISSION
SEC Building, EDSA, Greenhills
City of Mandaluyong, Metro Manila

COMPANY REG. NO. CS200908233
COMPANY TIN 007-315-916

CERTIFICATE OF INCORPORATION

KNOW ALL PERSONS BY THESE PRESENTS:

This is to certify that the Articles of Incorporation and By-Laws of

EL VIENTO PARTNERS CORPORATION

were duly approved by the Commission on this date upon the issuance of this Certificate of Incorporation in accordance with the Corporation Code of the Philippines (Batas Pambansa Blg. 68), and copies of said Articles and By-Laws is hereto attached.

This Certificate grants juridical personality to the corporation but does not authorize it to undertake business activities requiring a Secondary License from this Commission such as, but not limited to acting as: broker or dealer in securities, government securities eligible dealer (GSED), investment adviser of an investment company, close-end or open-end investment company, investment house, transfer agent, commodity/financial futures exchange/ broker/merchant, financing company, pre-need plan issuer, general agent in pre-need plans and time shares/club shares/membership certificates issuers or selling agents thereof. Neither does this Certificate constitute as permit to undertake activities for which other government agencies require a license or permit.

As a registered corporation, it shall submit annually to this Commission the reports indicated at the back of this certificate.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of this Commission to be affixed at Mandaluyong City, Metro Manila, Philippines, this 18th day of June Two Thousand Nine.

BENITO A. CATARAN
Director
Company Registration and Monitoring Department

June 18, 2009: El Viento Partners was incorporated

philstar GLOBAL

Pérez-led Alternergy bags 6 wind power projects

By Donnabelle L. Gatdula
Updated November 09, 2009

MANILA, PHILIPPINES – Alternergy Philippines Holdings Corp. (APHC) has signed six service contracts with the Department of Energy (DOE) for its proposed wind projects worth an estimated $85 million.

On August 12, 2009, the Korean and Japanese partners signed an investment agreement worth $100 million with the four Alternergy co-founders for the wind venture. It took them two years and eight months, from January 2007 to August 2009, to get from business plan on paper to reality. At last, they were in business.

With the infusion of funds, the founders were able to set up a separate dedicated office at Ayala Tower. Alternergy was joined by team members from Merritt Partners: Alma Roxas, Louie Pangilinan, Sandra Nepomuceno, Rowena Olano, Kit Taloza, and Bobby Caoili. Almost all are still with Alternergy to this day. Two months later, in October 2009, the DOE awarded six wind service contracts to Alternergy.

By 2010, they were aggressively measuring wind energy potential across Luzon — from the northern coast of Luzon to Mindoro island. Alternergy rapidly rolled out several 60-meter tall meteorological wind measurement towers in multiple promising wind farm locations in Pililla, Rizal; in Buguey, Ballesteros, and Sta. Ana in Cagayan Province; in Pagudpud, Ilocos Norte; in Cavinti, Laguna near Caliraya Lake; in Puerto Galera, Mindoro Oriental; and in Abra de Ilog, Mindoro Occidental. (In 2012, a taller 80-meter met mast was later installed in southern Pililla, which was renamed Sembrano). With an extensive network of eight met masts, Alternergy was de facto the country's leading wind developer, having established its own project pipeline of wind projects throughout the Philippines.

In September 2010, a year after its formation, the joint venture scored a breakthrough when the Asian Development Bank (ADB) and the government of Japan provided a $600,000 grant facility that would allow the project partners to undertake feasibility studies in three of the sites.

"There's a minimum average annual speed that a wind location has to have all year round. If it's less than that, then it's not an attractive wind site, and anything we spend on that, ADB will just reimburse as a grant. We don't have to return the money. If a site turns out to be commercially viable in terms of wind resource and logistics, and we decide to proceed in developing it, it becomes an interest-free loan and we repay ADB. It's a great program, we owe a lot to ADB for that," explains Gerry Magbanua, by then the CFO of Alternergy. In the end, in June 2014, the joint venture only had to repay for pre-development costs of the Pililla project in Rizal, which they proceeded to develop into a viable wind farm, while Laguna and Mindoro were deferred due to transport logistics and interconnection challenges.

October 23, 2009: DOE awards six wind service contracts to Alternergy with Energy Secretary Angelo Reyes and REMB Director Mario Marasigan

ADB ASIAN DEVELOPMENT BANK

ADB, Japan to fund feasibility studies into three Philippine wind farms

April 10, 2010

THE FINANCIAL — The Asian Development Bank (ADB) and the Government of Japan will fund studies into the feasibility of wind power facilities in the northern Philippines, which would help reduce the country's reliance on coal and oil-fired power, and cut greenhouse gas emissions.

August 9, 2011: On the second anniversary of the joint venture, senior management climbed the Sembrano ridge. Left to right: Knud Hedeager, Gerry Magbanua, Toni de Guzman, Eric Bucoy, and Vince Pérez

April 10, 2010: ADB announcement of Grant Feasibility Studies to Alternergy

GMA NEWS ONLINE
LATEST NEWS FROM THE PHILIPPINES AND AROUND THE WORLD

Ayala buys 50% stake in NorthWind Power for P513 million

March 21, 2011

AYALA CORP. on Monday said it is paying at least P513 million for acquiring a 50 percent stake in renewable energy producer NorthWind Power Development Corp.

Things were going smoothly until March 4, 2011, when parts of Japan were destroyed by a massive earthquake that also caused an accident at the nuclear plant in Fukushima. The plant was owned by Tokyo Electric Power, which also happens to be the majority owner of Eurus Energy, the Japanese partners in the joint venture. By then, they had only invested less than two million out of the $50 million they committed as investment.

Facing an uncertain future with Eurus Energy, Vince and Knud and other individuals that owned about 50% of the Bangui Bay wind farm decided to sell their stake in March 2011 to the Ayala Group's newly created energy platform led by Eric Francia. The sale provided enough funds that enabled Alternergy to buy out Eurus by December of the same year.

The sale also saw the departure of Poch, who decided to help his NorthWind co-founders. "NorthWind had a much smaller team, and the Bangui Bay project was entering a new phase of its project cycle, the end-of-warranty discussions with Vestas — another first in the Philippines," explains Poch. There was also a Feed-in Tariff for the Bangui Bay project under the RE Law and Poch was needed to help navigate the new regulatory framework. Taking over from Poch was Toni de Guzman, formerly with Price Waterhouse Coopers and Picazo Law.

Alternergy went to BDO's Joseph 'Bong' Lledo and Michelle Cillan, and in December, the company got its first loan. "We borrowed $2 million. We didn't have an operating plant. We didn't have any power assets. The $2 million loan from BDO was extended based on Vince's character for one year that kept getting extended and extended, with our continued pledge of Alternergy shares as collateral," Gerry says.

"So it was just us and the Koreans, but later the Koreans too had to sell out reluctantly, against their wish. The government of Korea, under the administration of President Madame Park Geun-Hye, instructed most government companies in 2013 to scale down their overseas investments to reduce the country's overall consolidated public debt. So on May 22, 2014, we had to buy out the equity stake of East West Power, with whom we had gotten along well," Knud says.

Left without its original Japanese and Korean partners, the Alternergy team explored various joint venture discussions on the Pililla Project with SN Aboitiz Power, Salcon Power, and MGen ▶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10 March 8, 2010: Knud Hedeager at Sta Ana, Cagayan met mast

11 February 17, 2010: Angeli Silang inspecting met mast in Barangay Pasaleng in Pagudpud, Ilocos Norte

12 September 2015: Pililla permanent met mast

13 August 13, 2010: Alternergy team beside Cavinti met mast, to celebrate one year after joint venture with East West Power and Eurus Energy

14 March 5, 2019: Tanay met mast installation

15 August 14, 2010: Abra de Ilog met mast installation

16 September 19, 2010: Puerto Galera met mast installation

17 October 8, 2022: Alabat met mast installation

of Manila Electric Company, none of which were satisfactory to Alternergy. Eventually they turned to another old contact of Vince from ADB, Josh Carmody, who put him in touch with Equis Funds of Singapore, which stepped in to help buy out the Koreans. "When we signed that deal in May 2014, we got some free shares again. Equis Funds came in with $45 million equity into Alternergy Wind One Corporation (the special purpose company for the Pililla Rizal wind project), and we negotiated a 10% free carry," Gerry says. Since it was proceeding to develop the Pililla project, Alternergy repaid the ADB grant facility the following month.

In July 2014, Alternergy Wind One Corporation borrowed $105 million from three local banks — BDO, RCBC and China Bank — the very first syndicated non-recourse project loan without a parent corporate guarantee for a wind energy project. "This is pioneering because we could not provide a corporate guarantee from a large corporate parent to assure the three lenders," Gerry says. "They're lending based on the credit strength of the project, without any guarantee from the owners of the project. That means if the project is lost, they cannot run to the shareholders for payment. Instead we pledged the shares of the project company, we pledged the receivables, we pledged the assets, we pledged the land of the project company. So if the project company defaults, the lenders will have to step in as the new owner.

"Second, they're all Philippine banks with little experience yet lending to a wind project so they're all learning for the first time. Third, because Alternergy is a young company — the other wind projects were being built by Ayala, or by First Gen of the Lopez group, or by PetroEnergy of the Yuchengco group — they may have given a parent corporate guarantee to their project lenders. We did not. In that sense, ours was a unique pioneering financing. Our Pililla loan syndicate even got a Sustainable Finance award from IFC. That was a nice recognition," Gerry added.

On June 9, 2015, the 54MW Pililla wind farm began operations, on time and within budget. Just a few days before the Philippine Independence Day, Alternergy announced that the operation of its Pililla Rizal wind farm was a step towards energy independence. It took eight years from business plan to actual electricity generation, from paper to reality, but at last, Alternergy had built its first renewable energy project. ■

▲ **May 5, 2014: Joint Venture signing for Pililla and Sembrano Wind Projects between Alternergy and Equis Funds with Josh Carmody, Yongbin Chen, Job Ambrosio, and PJS lawyers**

▼ **October 10, 2014: Officers of BDO, RCBC and China Bank visit to Pililla Wind Project Site with Gerry Magbanua**

PRO TIPS

1 Create a diverse team

Vince shares one of his learnings: "In 1996 in Singapore, we had set up a private equity firm called Next Century Partners. The partners were all friends, we all thought alike. When we were looking at deals, nobody ever questioned it. We made some good investments but we also made bad deals that if somebody had stopped and paused and said, wait a minute, are you sure? If somebody had raised a contrarian view, maybe we would have avoided investing in those bad investments.

"In forming Alternergy, we were very conscious that we all complement each other and that philosophy continues to this day. Among our senior management team is an engineer, a lawyer, a CPA, a banker who has worked with foreign banks. When you meet our senior executives, we're all so different. We made sure we allow each other to question one another and that's part of the value system we have."

2 Stick to your knitting

Knud explains: "It's a common expression that means, just do what you're good at. When we got stuck in the midst of the Global Financial Crisis of 2008, we pivoted and we focused on wind and only in the Philippines. There's this saying from Andrew Carnegie, 'put your eggs in one basket and nurture it carefully,' rather than the other saying, 'put your eggs in different baskets to diversify.' Since Bangui Bay was not part of Alternergy, we sold out, got some cash, and focused on Alternergy from then on. Focus on the business that you want to grow."

3 Negotiate for free shares

Gerry elaborates: "When we started Alternergy, we worked hard to get free shares that could be worth a lot later. It's part of our blood, sweat, and tears. Free carry, carried interest, or free shares — they're all the same. That's what partners in hedge funds and private equity firms strive for: free shares for the sponsors, like us founders.

"We can earn between 10 to 15% typically in free shares. When we formed this venture with our Japanese and Korean partners, we got 10% free shares. Their commitment was to put 50 million dollars each for a total hundred million dollar investment in the venture. They each own 45 percent and the El Viento Partners got 10% free shares. Just to be clear, they did not give us 10 million in cash. It's just 10% of the shares. Now that free shares could be worth zero or that could be worth a lot. It depends on how the business grows. Investors prefer the concept of giving free shares unlike, say, a founder of a company who demands a cash premium. We don't. Instead we only get reimbursement for actual incurred development cost plus free shares. Our investors know we are willing to bet on the company."

4 Build near a transmission line

Knud brings another lesson: "Any electricity from the northern tip of Luzon, to bring it south to the main power demand of Luzon around Metro Manila, requires an extensive system of transmission lines. Our Bangui Bay wind project had to build a 57-kilometer transmission line from Bangui to Laoag. When you transmit that far there will be significant transmission loss. If the National Grid Corporation (NGCP) does not have facilities near our project site, we may have to build the transmission line ourselves.

"Why is it that our wind projects are located close to Metro Manila? Because the main power load of the country is in Metro Manila and any transmission loss is minimal. That's why we decided to focus on Central Luzon near the main load center."

5 Keep your overhead low

Vince makes a final point: "How did we keep our overhead low when we started Alternergy? We outsourced. We did not hire many permanent employees and we paid ourselves on temporary consulting allowances until we raised third party equity. We just outsourced some tasks to our management company Merritt Partners and 'camped' in their office during our fundraising phase. We were blessed to be supported by the dedicated Merritt team and that allowed the Alternergy founders to focus on the fundraising and business rollout. This is one factor how Alternergy got started." ■

February 2010: Former Merritt Partners team: Vangie Moises, Gladys Policarpio, Sandra Nepomuceno, Kit Taloza, Wheng Olano. Except for Gladys, all of the Merritt Partners team joined Alternergy in 2008

Chapter 2

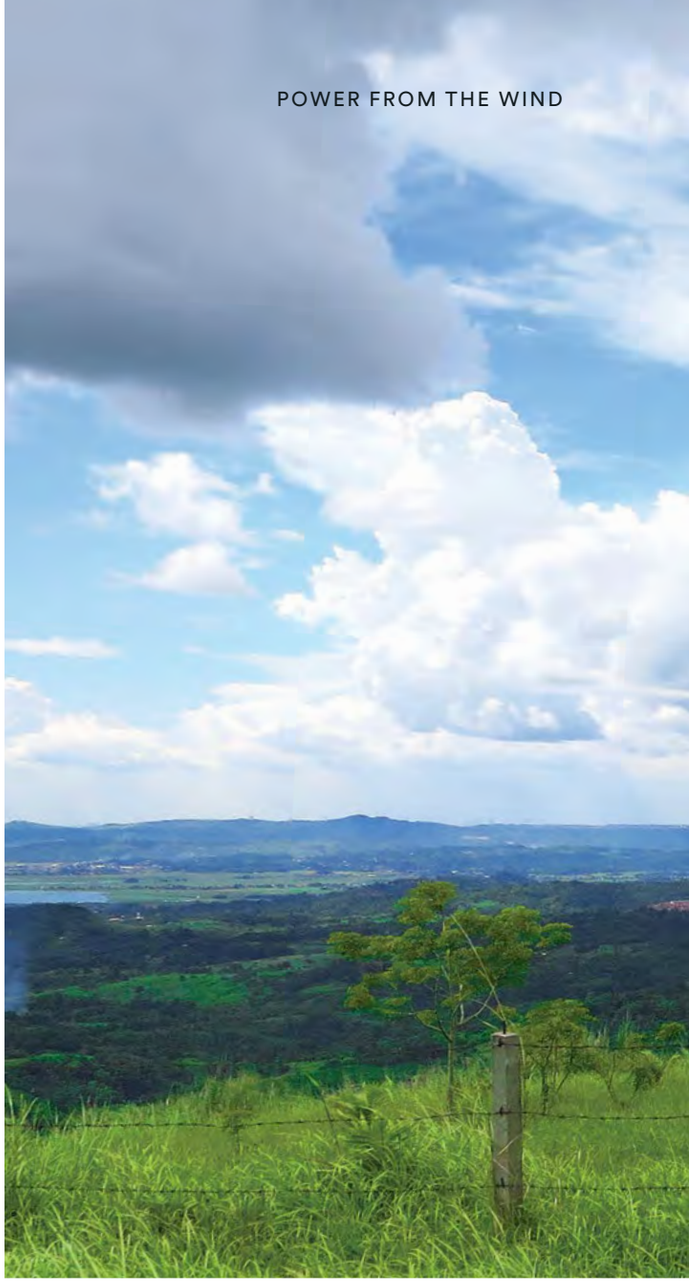
Power from the Wind

“We began operating the Pililla wind farm on June 9, 2015, a few days before Independence Day, June 12. We feel that renewable energy is energy independence, independence from imported fossil fuels.”

High up on the hills overlooking the town of Pililla in Rizal province, an array of wind turbines stand tall on top of the ridge, a commanding presence and imposing sight for motorists cruising along the winding road.

On a cloudy Saturday in September, most of the fiberglass blades are spinning slowly, in rhythm with the gentle noon breeze. At 125 meters in height, the towering machines impart a strangely calming atmosphere despite their immense size, whirring silently as admiring visitors take selfies at various vantage points.

Located just 40 kilometers east of Metro Manila, the wind farm in Pililla provides a clean source of electricity to an estimated 66,000 households in the nation's capital. It is connected to the distribution grid of Meralco, the Manila Electric Company, through a dedicated 10-kilometer long interconnection line, reducing transmission loss and facilitating the flow of wind-powered electricity to the biggest electricity market in the country.



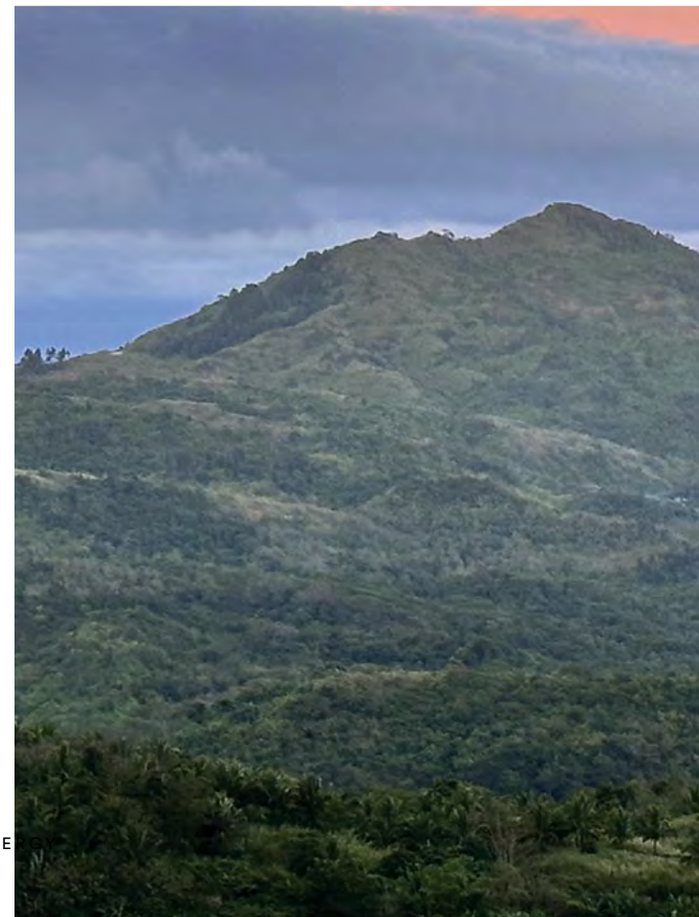
2010: Exploratory visit to potential wind farm site in Pililla Rizal

philstar GLOBAL

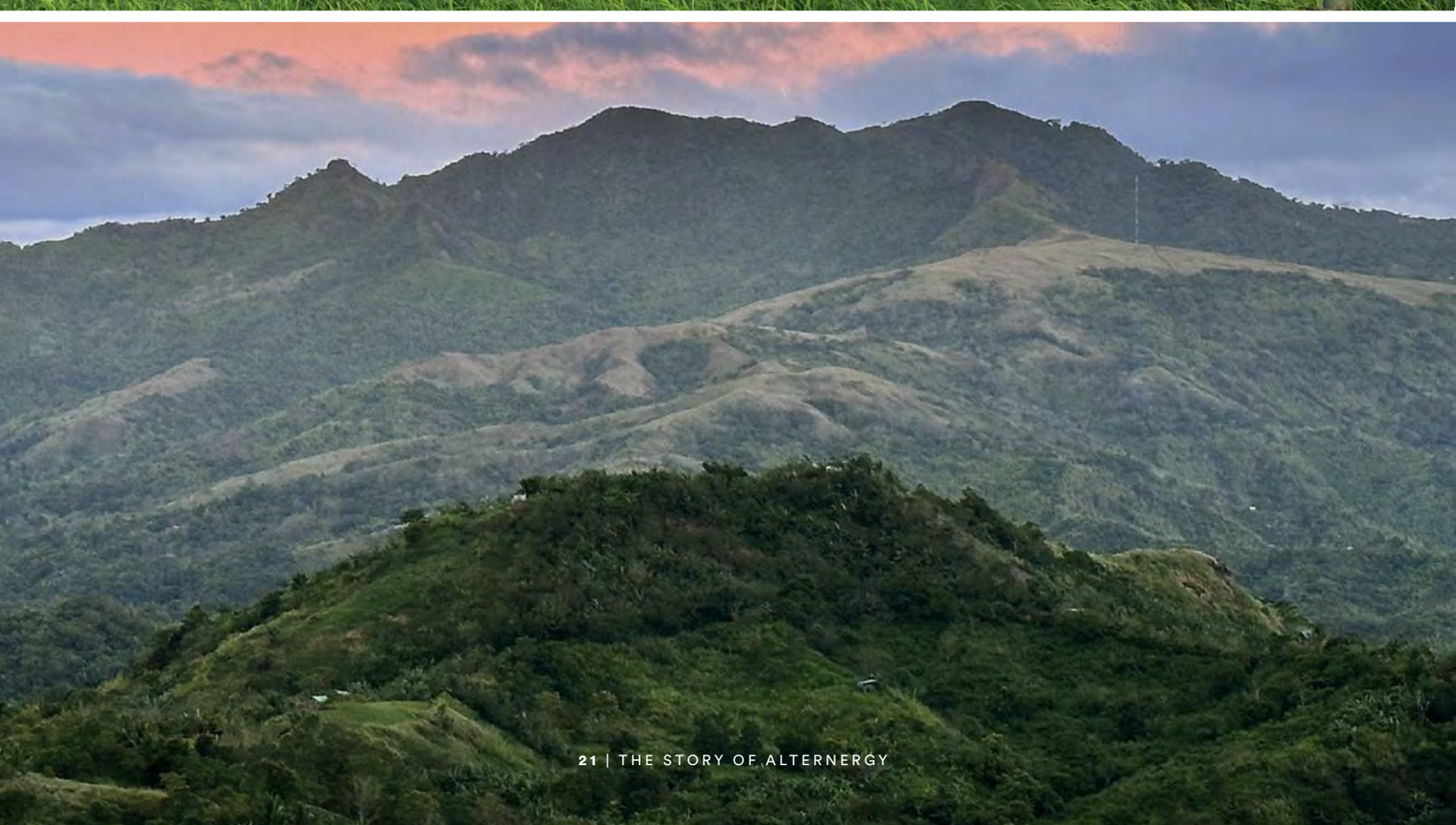
Alternergy wind farm project gets $130 M loan

By Donnabelle L. Gatdula
July 1, 2013

MANILA, PHILIPPINES – Four local banks led by BDO Unibank, Inc. are extending a $130 million loan to Alternergy Wind One Corp., the developer of the 67.5 megawatt wind farm power project in Pililla, Rizal province.



The picturesque hills of Tanay, Rizal 300 to 600 meters above sea level



INQUIRER.NET

Rizal wind farm rises to supplement energy

By Maricar Cinco
March 01, 2015

MANILA, PHILIPPINES – A 27-tower wind farm in Rizal province is expected to begin generating electricity this summer, supplementing energy supply in Metro Manila and Rizal.

1 Wind blades at Pililla Wind Project site

2 March 23, 2012: A second met mast was installed in Pililla

3 Alternergy logo on nacelle. It became an advertisement for future wind project opportunities

Pililla was one of the potential wind sites in the Philippines identified in a pilot study done by the National Power Corporation with the National Renewable Energy Laboratory of the US, which became the main reference for the Alternergy team. To validate the data, in August 2010 they installed a 60-meter meteorological mast to measure the wind year-round so that potential wind resources can be assessed, taking into account seasonal variations, says electrical engineer Margo Mananquil, who was part of the project from the pre-development stage to actual operations.

"My task was to build the transmission line and interconnection with Meralco, the substation, then the wind farm, mainly on the electrical side while Knud was the overall project lead," says Margo.

He guides a group of Alternergy staff, who are visiting the wind farm for the first time, to the very first turbine built on the ridge. It's part of a cluster of three towers just across the road from the 80-meter meteorological mast that measures wind speed and direction used as a reference to data measured by each wind turbine. Data from the turbines is correlated with the measurements to ensure that the wind turbines are working properly.

On this balmy afternoon, the blades of the wind turbines are facing west towards the scenic shores of Laguna de Bay. Alternergy's name and logo are emblazoned on the nacelle, a boxy container housing the generator and other mechanical components that are needed to convert the spinning of the blades into energy. Three blades are attached to the nacelle, which can rotate 360 degrees so that the blades will face the east when the stronger northeast monsoon winds start blowing in October, Margo says. The blade pitch can be adjusted so they can catch the wind efficiently, or rotated to a flat position when there are storms, as the rotor only allows a maximum ▶

▲ **September 20, 2012:** Signing of Pililla Lease agreement with Rizal Provincial Government with Governor Casimiro Ynares III and Mayor Leandro Masikip

speed of 90 kph to avoid any damage. "If there's a storm, the blades will stop turning and they will be rotated in such a way that the wind just passes over them," Margo says.

Near one of the clusters, Margo points to a spare blade on the ground, which is always there in case there's a need for replacement. The blade surfaces have to be smooth to maximize efficiency, so when they are coated with dust, technicians have to rappel down the blades to clean them, says engineer Neil Tanguilig, the senior project manager for Alternergy's wind projects. Wind turbines have a lifespan of 20 to 25 years, and the maintenance crew must check the condition of the machines every six months, Neil says.

Inside each tower is a lift that carries maintenance crews to the nacelle high above the ground. Each of the 27 wind turbines, made by the Spanish company Gamesa, is capable of producing two megawatts of wind power, yielding a total of 133,500 MWh a year, or 28% net generating capacity of the total 54 MW wind farm.

"The land around here used to be pineapple farms, and there are still some of them left," Margo says. When the team started exploring the area in August 2010, there were very few houses around. "There's now a huge subdivision over there," he points to a sprawling settlement near the lakeshore.

A barbed wire fence surrounds the lot where the mast is located, one of the inevitable precautions that have become necessary when land claims start becoming a problem in areas where there are major infrastructure projects. The wind turbines occupy more than 30 hectares of land along a two-kilometer stretch of *barangay* road in Barangay Halayhayin, a sparsely populated upland village. "Actually, we never had problems with operations, except for this land issue," Margo says. With only a dozen staff in the field office, securing the huge tract of land owned by Alternergy or leased from various individuals and entities, including the Rizal provincial government, became a major undertaking.

Margo recalls their experiences bringing the parts of the wind turbine up the hill, especially the blades that could not be cut into sections, unlike the tower. Initially, their transport logistics consultant said the blades could not be transported by land because of the narrow roads, so the team looked for ways to bring the blades from the Manila port to the site by crossing Laguna de Bay. "There were numerous studies on transport logistics, and even Sec. Vince was there when we measured the depth of the water in Laguna Lake. I recall it was only three meters," Margo says. "We rented a tugboat and it was fun because the project was exciting and was the first for the company." They ended up abandoning the plan and instead transporting at night through the provincial roads, removing a fence around one property to accommodate the 45-meter length of each blade.

To obtain the highest yield from the wind farm, a process called micrositing was done, with each wind turbine positioned in the most ideal location where they can catch the strongest winds. A minimum distance approximately twice ▶

▶ **July 30, 2010:** Martha Garay with Eurus' Richard Ninomiya on a Pasig River inspection as potential transport route of wind blades to Pililla

▶ **July 6, 2011:** Margo Mananquil with Vince Pérez doing water depth survey near Malaya, Rizal

4 Planting after construction for slope protection

5 June 18, 2013 - Rizal Day: Ceremonial Groundbreaking of Pililla Wind Project with Energy Secretary Jericho Petilla, Governor Casimiro Ynares III, and Pililla Mayor Leandro Masikip

6 June 1, 2014: Alternergy team celebrating the formal Notice to Proceed (NTP) to build the Pililla Wind Project

7 July 5, 2016: At Gamesa headquarters in Pamplona, Spain with Javier Larrañeta and Thierry del Más

the diameter of the turbine is required in a wind farm. Due to the uneven terrain and conditions on the ground, however, the proposed locations cannot always be followed and maximum efficiency is sometimes diminished. "Sometimes there's a house in the area, or the landowner will say, no you can't put it there because I have a farm there," says Margo.

In the central cluster, a lone sentry sits in his post below the turbines. The wind farm is divided into three clusters, each one secured by personnel against petty theft and vandalism. "We had a few experiences where some kids would play with the cover of the bolts at the base, or they would steal it. To prevent these incidents, we placed guards in each cluster," says Margo.

The undulating landscape is a haven for birds soaring above the swaying grasses and lush vegetation. Margo says a small number of trees were cut during the construction, and the company has designated a tree planting site near one of the turbines to restore the landscape.

"Pre-development was the most difficult stage of the project. Many of the government permits took one year to process, particularly land conversion. Dealing with the community was the easiest part because we had a good project - it's not coal or gas," Margo says. "This was a fun project to do because Sir Vince really lived up to his philosophy. It's not just words."

In June 2014, Gamesa began full-scale construction that was completed in May the following year. The wind farm began operating in June 2015, just in time for Alternergy to avail of the feed-in-tariff rates offered by the government as an incentive for renewable energy projects.

The feed-in-tariff is a policy mechanism that promotes the use of renewable energy through a guaranteed set price for electricity provided to the grid. In the pricing model pioneered two decades ago in Germany, power utilities are mandated to enter into long-term contracts with producers of renewable energy such as wind and solar at specified rates that are typically higher than the retail price of electricity.

In the Philippines, the feed-in tariff rate is set by the Energy Regulatory Commission based on commercial factors such as cost of debt and equipment. Renewable power producers are paid by the government's National Transmission Corporation, or Transco, which gets the money from the feed-in tariff allowance included in the bill of every electricity consumer in the country. "If you consume a lot, you pay more. If you consume ▶

8 October 20, 2014: Alternergy team finalizing the exact location of Wind Turbine number 15. Left to right, geotech consultant Lyra Habana, Angeli Silang, Toni de Guzman, Neil Tanguilig, Knud Hedeager, and William Refina

9 November 12, 2014: Knud with Energy Secretary Jericho Petilla during Pililla construction inspection

10 September 11, 2015: Vince and Gerry climbed to top of wind tower, Denmark

11 May 25, 2015: Gerry, Vince, and John Rock with bank executives of BDO, RCBC, and China Bank on Pililla site visit

less, you pay less. So that is collected by Transco, and that is then distributed to a wind power project, a solar project, a hydro project," explains Gerry Magbanua.

Some of the revenues were used to pay a consortium of local banks — Banco de Oro, Rizal Commercial Banking Corporation, and China Bank — that provided $105 million in project financing for the wind project, the first non-recourse loan without a corporate guarantee for a Feed-in-Tariff project. The innovative financing structure earned the Pililla project a Sustainable Energy Finance Award from the World Bank group's International Finance Corporation.

Equis Funds, Alternergy's partner in the project, sold its shares in 2018 to another private equity fund — Global Infrastructure Partners (GIP), which in turn created VENA Energy. "When they sold, we sold our 5% free shares so we only have 5% shares left. We had an "Earn-Out", or *balato* in Tagalog. Equis sold it for a significant profit to GIP and we got a nice handsome premium of ▶

12 July 24, 2015: Alternergy Wind One Corporation signing of Renewable Energy Purchase Agreement with TransCo CEO Rolando Bacani

13 August 31, 2016: Vince Pérez, Gerry Magbanua, and Eduardo Martinez-Miranda receiving IFC Sustainable Finance Award with BDO's Bong Lledo

14 July 5, 2015: Certain towers named after family members of Alternergy team

15 January 20, 2016: Formal Inauguration of Pililla Rizal Wind Farm and Visitor Center with Rizal Governor Rebecca "Nini" Ynares, Vice Governor Frisco San Juan, Pililla Mayor Leandro Masikip

several million dollars — partly earn-out, partly the value of our 5% shares that we sold — and that amount was reinvested in the company. That's how we grew," Gerry explains. "So right now, all we own of the Pililla wind farm is the remaining 5% free shares. The rest is owned by VENA Energy. We receive several million pesos worth of dividends for that 5 percent stake. So all in all, it was a very profitable project for us," he adds.

The wind farm started operations on June 9, 2015, another significant date for Alternergy. "We began operating a few days before Independence Day, June 12. We feel that renewable energy is energy independence, independence from imported fossil fuel," Vince remembers.

Six months later, the wind farm was formally inaugurated on January 20, 2016. "It was a meaningful day for the entire team and was especially poignant for me in the sense that it was also my late father's birthday," says Vince. The date also marked one year after the first tower was erected on January 22, 2015.

Five of the 27 towers in the wind farm were built on property leased from the provincial government of Rizal. "We had the formal inauguration and a huge crowd attended the event. Then-Rizal governor, Rebecca "Nini" Ynares, whispered to me, 'you know we have this land that the province owns in Tanay, a large tract of land. Perhaps you can explore if the wind is good there and if it's viable then you could lease the entire property from us so we can earn lease income. Why don't you take a look?' That side conversation was the seed that planted the idea for exploring our next wind farm called Alternergy Tanay Wind Project," Vince says. ▶

16 January 20, 2016: Alternergy team at formal Inauguration of Pililla, Rizal wind farm

17 **March 5, 2019:** Toni de Guzman and Gerry Magbanua crossing creek to hike up to Mt. Batolusong in Tanay, Rizal

18 **April 3, 2019:** Beside wind monitoring ZX300 LiDAR. Left to right: Reyfel Maglines, Toni de Guzman, Neil Tanguilig, Knud Hedeager, Gerry Magbanua, Vince Pérez

19 **March 5, 2019:** Tanay met mast installed on Mt. Batulusong in San Andres

20 **November 17, 2023:** Briefing for Tanay Mayor Lito Tanjuatco and SB officials by Knud Hedeager, Butch Refina, Kim Pagdilao, Snap Lopa, Margo Mananquil, Ric Fernando, and Me-Ann Jayme of Alternergy

A hilly town popular among artists and weekend cyclists, Tanay was another ideal location for a wind farm close to Metro Manila. "It's a no-brainer, even closer, one town closer to Manila than Pililla with a proven wind resource," says Mechanical Engineer Butch Refina, project manager for Tanay. Alternergy obtained a Wind Energy Service Contract from the Department of Energy in 2017 that gave the company 25-year concession rights to develop Tanay's wind resources. A subsidiary, the Alternergy Tanay Wind Corporation, was set up for the new project.

In November 2018, the Rizal provincial government gave permission for Alternergy to conduct a wind resource assessment in Tanay. The following year, in March 2019, an 80-meter meteorological mast was built on Mt. Batulusong while a ZX300 LIDAR instrument was placed near Mt. Bangkaan to measure wind resources. "The wind speed shows that it's actually quite commercially viable. We got a third party to assess the potential wind resource and we're now looking at 14 towers, each one is up to 8 megawatts and as tall as 196 meters. That is almost double the capacity of Pililla and it's more efficient in terms of capital expenditures," Knud says.

philstar GLOBAL

Wind farm drawing tourists to Rizal

January 20, 2016

MANILA, PHILIPPINES – Tourists are starting to flock to a 60-hectare farm in Pililla town, Rizal province for a view of 27 wind turbines, each equal to a 33-story building, erected against a backdrop of rolling mountains.

Unlike the Pililla project, there were some constraints with the Tanay location, which has an elevation of up to 900 meters in Barangays San Andres and Cuyambay. At first, the Civil Aviation Authority of the Philippines (CAAP) was concerned that the proximity of the wind farm to the flight path of NAIA's Runway 6 might cause air traffic problems. According to Reyfel Maglines, Alternergy's geodetic engineer, Alternergy sought advice from an international aviation expert and after a public consultation with the airlines where examples of ▶

BusinessWorld

Alternergy unit forges lease revenue-sharing deal with Rizal gov't for 100-MW wind project

By Sheldeen Joy Talavera
October 11, 2023

ALTERNERGY Holdings Corp. said its subsidiary inked a lease contract, including a revenue-sharing agreement, with the provincial government of Rizal for a 100-megawatt (MW) onshore wind project.

▲ **October 9, 2023:** Tanay Lease Agreement with Rizal Governor Nina "Ricci" Ynares, Vice Governor Dr. Reynaldo San Juan, Atty. Salve Rubaya-Adamos, with Vince, Gerry, Ina Arriola; behind (left to right), Butch Refina, Charles Flores, Knud Hedeager, Rowena Olano, Vangie Moises, and Kim Pagdilao

wind farms close to airports in other countries were presented, CAAP finally granted the height clearance for all the project's towers in January 2023.

Another challenge was the fact that the site is part of the Kaliwa Watershed Forest Reserve, inside the multi-use zone on the perimeter of the protected area. Fortunately, one of the activities allowed in the buffer zone is building renewable energy projects, so Alternergy was able to secure an Environmental Compliance Certificate from the DENR and a clearance from the Protected Area Management Board (PAMB). Lastly, the company had to obtain a Certificate of Non-Overlap with the ancestral domain of Dumagat-Remontado communities, who were living in the adjacent vicinity, from the National Commission on Indigenous Peoples.

The COVID-19 pandemic that began in 2020 and resulted in severe lockdowns led to delays in the project. "Typically, a developer who gets a service contract has five years to declare whether it will proceed with the project or not. Either you declare commerciality and start building a wind farm or you surrender the service contract and you say the site is not feasible," explains Kim Pagdilao, Alternergy's corporate legal counsel. With the deadline looming in August 2022, Alternergy submitted a letter from Rizal Governor Rebecca "Nini" Ynares regarding the delay in the discussions on land lease agreement due to the pandemic. The DOE relented and extended the deadline to March 2024.

After the 2022 elections, the new Rizal Governor, Nina Ricci Alcantara Ynares-Chiongbian, took over from her mother and assigned her Vice Governor JunRey San Juan to renegotiate the lease. It became an innovative agreement that would give the provincial government a certain percentage of the revenue from the wind farm, with guaranteed minimum amounts corresponding to a fixed rate per square meter per year in case the project was not performing well, instead of a plain lease. On October 9, 2023, the Rizal provincial government finally signed the Lease Contract and Revenue Sharing Agreement with Alternergy.

The last hurdle for the wind farm was the interconnection with the national grid. "There's a large 500 kV line nearby, the biggest highway of electricity transmission in the country. These ▶

are large towers that were already near the site of the Tanay Wind Farm. But the challenge is we need to build a substation near it," says Charles Flores, Alternergy's transmission engineer. If they wait for the National Grid Corporation (NGCP) to build the facility, they were told the earliest date was 2033 because the grid operator was swamped by demand from multiple power plants all over the country. To solve the problem, Alternergy decided that it would build a substation, with a transmission route about two kilometers from the wind farm, and later turn over the substation to NGCP under a cost recovery arrangement.

On July 12, 2023, the Tanay Wind Project received a Certificate of Award under the 2nd Green Energy Auction Program of the DOE, with a 20-year offtake fixed rate of Php 5.3088 per kWh. Construction of the wind farm began on June 2024, and it is expected to be operational by the end of 2025.

The Alabat Wind Farm in Quezon province, Alternergy's foray outside Rizal province, arose when Alabat's then mayor Fernando Mesa saw the Pililla wind farm while he was driving from Antipolo and thought about how it was often windy on Alabat island. He noticed the Alternergy logo on the nacelle and got in touch with Alternergy's Annette Rafael through a common contact to persuade the company to explore the wind power potential on the island.

On August 30, 2017, an exploratory team led by Knud Hedeager arrived on Alabat island on a chartered seaplane, creating a bit of excitement among the townsfolk. The island is located on the eastern seaboard of Luzon Island, with one side facing the Pacific Ocean, and the team was impressed with the steady prevailing northeast breeze from the Pacific.

Alternergy secured a wind service contract for Alabat in December 2019. Wind resource engineer Neil Tanguilig, project manager for Alabat, says the project would have a huge economic impact for the island, which relies on coconut farming as the main livelihood and has very limited manufacturing activities in its three municipalities. Located in Lamon Bay just off the coast of Atimonan town, the project will have a 69 KV transmission line that will provide a stable source of electricity and also distribute power to the mainland, Neil says. ▶

ABS-CBN NEWS

New wind farm on Alabat Island, Quezon province gets green light

October 24, 2023

MANILA – Renewable energy firm Alternergy announced on Tuesday that its proposed wind farm on Alabat island in Quezon province has been approved by its Provincial Development Council (PDC).

Republic of the Philippines
PHILIPPINE NEWS AGENCY

Alternergy, Quezelco 1 partner to dispatch power from Alabat wind farm

By Kris Crismundo
October 24, 2023

MANILA – Renewable energy firm Alternergy Holdings Corp. has partnered with Quezon 1 Electric Cooperative, Inc. (Quezelco 1) to dispatch clean power from Alternergy's Alabat wind power.

▼ **August 30, 2017: Knud Hedeager, Margo Mananquil, Butch Refina, and Neil Tanguilig flew on a seaplane to Alabat island**

21 December 18, 2022: Left, Alabat met mast installed; right, Pacific coast of Alabat island

22 June 24, 2022: Groundbreaking of Alabat met mast with Alabat then Mayor Fernando Mesa, together with Neil Tanguilig, Butch Refina, Reyfel Maglines, and Bryan Medrano

23 May 9, 2024: Vince with Tanay Mayor Ramil Arquiza (middle) and Quezon Mayor Juan Escolano (left)

24 July 5, 2023: Alternergy's presentation to Quezon Provincial Governor Dr. Helen Tan. Also in photo are Charles Flores, Neil Tanguilig, Gerry Magbanua, Vince Pérez, Ina Arriola, Atty. Millicent Reyes, and Butch Refina

25 July 19, 2023: Neil Tanguilig, Reyfel Maglines (hidden), Charles Flores, Vince Pérez, Ina Arriola briefing Alabat municipal officials

PR Newswire News Products Contact

Landmark achievement: Envision Energy secures first-ever order with 162 MW wind turbines in the Philippines

February 5, 2024

ENVISION ENERGY awarded first-ever contract to supply 162 MW wind turbines for Alternergy's Alabat and Tanay Wind Projects, featuring a combination of 6.5 MW and 8 MW rated capacity. The project will be the largest wind turbine in the Philippines once installed.

BusinessWorld

Alternergy taps China firm for Alabat, Tanay wind projects

By Sheldeen Joy Talavera
March 19, 2024

ALTERNERGY Holdings Corp. announced on Monday that it has awarded the contract for its Alabat and Tanay wind power projects, with a combined capacity of 163 megawatts (MW), to China Energy Engineering Group Guangdong Electric Power Design Institute Co. Ltd. (GEDI).

▲ **May 9, 2024:** Alternergy team at Groundbreaking Ceremony of Alabat Wind Power Project. From Left to Right: Reyfel Maglines, Charles Flores, Adrian Villaflor, Kim Pagdilao, Mabel Cudiamat, Director Marivic Españo, Annette Rafael, Sandra Nepomuceno, Neil Tanguilig, Knud, Vince, Gerry, Carmen Diaz, Bea Bathan, Snap Lopa, Ina Arriola, Maria Pérez, Vangie Moises, Alaiza Flores, Glen Buenaventura

Like the Tanay project, the Alabat Wind Project also received a Certificate of Award under the 2nd Green Energy Auction Program of the DOE on July 12, 2023, with a 20-year offtake fixed rate of PhP 5.2888 per kWh. Groundbreaking of the Alabat wind farm was held on May 9, 2024 with over 500 officials and guests in attendance on the island, including Quezon Governor Dr. Helen Tan, Vice Governor Third Alcala, 4th District Congressman Atty Mike Tan, Mayor Ramil Arquiza of Alabat, and Mayor Juan Escolano of Quezon municipality. The Tanay wind farm groundbreaking followed on June 4, 2024 with Rizal Governor Nina Ynares, Vice Governor Dr. Reynaldo San Juan, Tanay Mayor Lito Tanjuatco, and Congressman Dino Tanjuatco. ▶

26

27

26 June 4, 2024: Alternergy team at groundbreaking ceremony of Tanay Wind Power Project

27 March - April 2024: InterConnection agreements with NGCP CEO Anthony Almeda for Tanay and Alabat projects

28 December 20, 2023: Neil Tanguilig and Butch Refina inspecting next generation turbines in China

Alternergy co-founder Knud Hedeager, who brought the technical knowhow from the wind industry and slowly grew the team's technical capability, says the Philippines has harnessed less than 10 percent of its onshore wind potential so far. "There is still a lot to be done, especially in grid infrastructure," he says. "We devote a lot of time finding options on interconnecting our projects through frequent discussions with NGCP." In March and April 2024, after months of extensive talks, Alternergy signed crucial Interconnection Agreements with NGCP for its Alabat and Tanay wind projects. Construction of the two wind farms, which have a combined capacity of 176MW, began in June 2024. Both are expected to be operational by the end of 2025.

"The new frontier is really offshore," he says. "There is more potential in offshore wind farms but although there is a lot of interest, the waters in the Philippines are too deep and there are few areas with shallow waters. One alternative could be floating wind farms, which are being tested in Europe but the technology is still in its infancy," Knud says. ■

Daily Tribune

AWPC, NGCP ink Alabat wind power project ICA

By Maria Bernadette Romero
March 31, 2024

"The Interconnection Agreement signed by Alternergy subsidiary Alabat Wind Power Corp. and the National Grid Corporation of the Philippines enables the transmission of renewable energy from the Alabat Wind Power Project through the NGCP's 69 kV Hondagua transmission line in Lopez, Quezon."

28

PRO TIPS

1 Protect your social capital

Vince shared one lesson learned: "In one of our projects, a major shareholder now manages the day-to-day operations, instead of Alternergy. We don't want to lose management control of a project. At that time, that was the deal that we had to take. But going forward, we want to manage and operate our own power plants. We don't mind selling down partly our equity in our projects but we should continue to manage day-to-day operations. Why? Because we have to deal with the so-called 'social fence.' We as developers were the original ones who approached the governor, mayors, barangay captains, the landowners. What if we go back again for another project in the same province. We have a lot of explaining to do. We will be asked: 'Are you going to give up day-to-day management again? Who will we be dealing with?'"

2 Persevere in finding a solution

Knud shared a major problem that could have been a deal-breaker for the Tanay project. "Initially, the Civil Aviation Authority had concerns about the wind farm location in Tanay. As it turned out, it was about 35 kilometers in the flight path of Runway 6 of Ninoy Aquino International Airport (NAIA). They were concerned that in case there was an accident, if an aircraft taking off towards that direction encountered a mechanical problem, say from a bird strike, the aviation authorities wanted to make sure there was a safe enough airspace for an aircraft to turn around. If the Tanay towers were excessively too high on top of a mountain ridge, they were concerned and were reluctant to issue a height clearance permit.

"And this is one of the values of Alternergy. We never gave up. So we said, why don't we get an expert from abroad to do a survey of whether any airports around the world had allowed a wind farm nearby with some slight adjustment. We searched all over the world for an aviation expert. We had an Aviation Standards Review compiled by DNV GL, a German consulting company, that showed there have been airports in the U.S. and Canada that have, with just a minor change in the runway approach rules, allowed a wind farm adjacent to the airport. We conducted a virtual public consultation through MIAA with all major local airlines in May 2022 that operate out of NAIA, on whether or not they felt our wind farm location was an aviation threat, and the conclusion of the chief pilots was no, no, no, it's so far and so low that it was not going to affect their flight procedures. On that basis, with the recommendation of this aviation expert, in January 2023, the CAAP gave us a height clearance permit for all our towers. That's an example of perseverance and persistence," Knud explained.

3 Connect it yourself

Gerry shares the company's answer to the connectivity barrier: "Whenever we look at any renewable power site, whether it's wind, solar, hydro, the biggest challenge is, how near or how far can we interconnect to the national grid? In Tanay, we chose it because there's a huge 500 KV line near the site of the Tanay Wind Farm. The biggest challenge of the entire industry now is that NGCP is swamped by demand from multiple power plants around the country. You could wait for them but they said the earliest they could build a substation near Tanay was 2033. Lesson learned – you don't wait for NGCP to build it. You build it yourself and then later you turn it over to them under a cost recovery arrangement. So that's the way we're going to do it in Tanay. We're going to build ourselves a substation right near the 500 KV transmission line that crisscrosses our service contract area." ■

Alternergy works closely with NGCP. Vince with NGCP CEO Anthony Almeda

Chapter 3

Power from the Sun

> “Solar power is less site-specific and it’s modular, which means you can design systems as small or as large as the customer might need, thereby providing clean energy access to communities that don’t have a lot of resources available.”

At the Yale University in 2006 when Vince was teaching an MBA course, one of his students was Mike Lichtenfeld, with whom he shared a background in conservation and environmental advocacy, as well as in finance. Mike has worked for The Nature Conservancy in Indonesia, where he became fluent in the country's language, and in investment banking in New York.

After graduation, Mike worked for Fotowatio which was acquired by SunEdison, one of the biggest renewable energy companies in the world that developed solar farms in the western US, including Nevada, California, and Arizona. Vince and Mike kept in touch through the years, taking time for a chat in San Francisco whenever Vince would stop over on his way to Yale to attend meetings as an advisory board member of the university's Center for Business and Environment, and when Mike would visit Southeast Asia. Both men bonded over a shared passion for travel, music, and scuba diving. In 2012, they decided to set up a solar business focused on providing access to clean energy for underserved island communities.

"We had the same ethos, same values, same interest in energy, same region of the world that Mike was interested in," Vince says. At the time, Alternergy was focused on wind projects and Vince did not want to distract the team, so he decided to invest in the solar enterprise through his other Philippine company, Next Century Partners. Their start-up, Solar Pacific Energy Corporation, was launched on January 30, 2013, initially under a 50-50 partnership with the two founders investing personal seed capital.

Originally, Vince and Mike had the ambitious plan of bringing clean energy to vulnerable and off-grid islands in the Philippines, Indonesia, and throughout the Pacific, hence the name of the company. Mike embarked on a journey to several islands including Guam, Palau, Yap, and Indonesia but traction was slow, so just as Alternergy had done in the past with the original business plan, Solar Pacific pivoted its focus on the Philippines.

"What I like about solar power is that it is less site-specific and more modular compared to wind or hydro, which are more location-specific due to resource availability," says Mike. "Solar is very modular, meaning you can design systems as small or as large as the customer might need, thereby providing clean energy access to communities that don't have a lot of resources available, especially island communities where they're not connected to the main grid. Some islands are too small to host a large wind project, or their demand isn't large enough to make wind or hydro economically feasible. Solar is a flexible technology that allows you to deliver in more remote places that may have other constraints, and to bring clean energy to some places that need it," Mike says.

As it turned out, Solar Pacific's first customer would not be a remote island community but a local power utility servicing a rapidly growing city in Mindanao. Vince had remembered that ▸

September 12, 2012: Vince visiting the pioneering 1 MWdc CEPALCO solar farm, with Oliver Labares

philstar GLOBAL

Kirahon inaugurates largest solar facility in Mindanao

March 17, 2016

MANILA, PHILIPPINES – Mindanao gets another solar plant supplying to the grid an additional capacity of 12.5 megawatts (MW), the largest in the region to date.

▲ **February 12, 2014:** Left, Vince brought Mike to visit CEPALCO solar farm. Right, Mike with Oliver Labares surveying the future Kirahon solar plant site

when he was Energy Secretary, he had met Ramon Abaya, the enthusiastic CEO of Cagayan de Oro Electric Power & Light Corporation, or CEPALCO. "He was very keen on solar power. He was Mr. Solar Power Guy," Vince says. The power utility pioneered the very first solar power project in the Philippines, a one-megawatt plant in Cagayan de Oro, through the passion and initiative of Abaya. Vince had inaugurated that project in 2003 and ten years later, he reached out to CEPALCO and asked if they were willing to collaborate with Solar Pacific. By this time, Ramon Abaya had passed away and his family, led by his nephew Jose Ignacio "Jigs" Carlos, agreed to work with the company in honor of their founder. Solar Pacific signed its first bilateral power supply agreement with CEPALCO for the Kirahon solar farm, a large-scale 12.5 MWdc solar photovoltaic project, on November 21, 2013, the first of its kind in the country. The new project company, Kirahon Solar Energy Corporation (KSEC), quickly began securing all necessary permits and regulatory approvals and finalizing plant design. The following February, Mike and Vince visited the Kirahon site and dropped by the country's first solar farm to say hello to the plant manager, Oliver Labares.

"Solar made sense in Mindanao because it is closer to the equator, where wind intensity is less and is not a major resource there," explains Vince. "The intensity of wind energy is stronger the farther away you are from the equator, in the more northern or southern latitudes."

On December 19, 2014, Solar Pacific signed a shareholder's agreement with Mindanao Energy Systems or MINERGY, the power generation subsidiary of CEPALCO, which would own 25 percent of Kirahon Solar Energy Corporation.

On January 22, 2015, the Sant Foundation came in as a minority equity shareholder in Solar Pacific, on the condition that the latter would invest in the Kirahon Solar Farm. The philanthropic group is chaired by Roger Sant, who founded the global power company AES. Roger and Vince were both active with WWF, and Roger is also a mentor and business partner of Vince's company, the Asian Conservation Company.

On January 23, 2015, Solar Pacific signed an engineering, procurement, and construction contract with the German engineering firm JUWI, which Vince had visited in November 2014 to meet its COO Stephan Hansen at the company headquarters in Wörrstadt. "Our philosophy is, if we're going to work with a company, we might as well get to know the senior officers and they get to know us," Vince says. "Because one never knows, projects like this always have hiccups and it's important to have high-level contact because ▶

▲ **December 19, 2014:** Joint Venture signing with Jigs Carlos and Ed Bautista of Mindanao Energy Systems with Mike, Vince, and Eduardo Martinez-Miranda

▶ **November 21, 2014:** Vince at Juwi Headquarters, Wörrstadt, Germany

projects don't always go on schedule or as planned and you need personal relationships to sort things out." Construction of the solar farm by JUWI and its local subcontractor First Balfour began immediately.

During construction, Solar Pacific had to engage with the Energy Regulatory Commission (ERC) regarding the power supply agreement with CEPALCO. As a distribution utility, CEPALCO is a regulated monopoly and the ERC had to approve the rate stipulated in the power sale agreement. The Kirahon solar farm was a pioneering enterprise and the ERC had yet to evaluate a solar power project. Before solar, all rates were based on alternating current (AC), the type of electricity used in most homes and buildings. The solar farm would be producing direct current (DC), the type found in batteries.

"Most power plants in the Philippines at the time were diesel or coal, which have many moving parts to convert mechanical energy to electrical energy," says electrical engineer Alex Santella, Director of Technical Operations for Solar Pacific, who joined in 2018 after having worked on Kirahon for his previous German employer. "A solar farm has no moving parts. The solar panels convert sunlight directly to DC energy, which in turn is converted to AC energy using medium voltage inverter stations before it can be injected to the grid," he explains. In the case of Kirahon, 12.5 MWdc are produced at peak gross capacity as direct current, and after going through the inverter, the net energy generated is 10 MWac to be injected to the CEPALCO grid.

At around this time, even though solar power was already used widely elsewhere in the world, it was still quite new in the Philippines. "When we started the company and we were looking for opportunities back in 2013 and 2014, we were one of the first developers in the local market and the policy support wasn't quite ready," Mike says. "The technology was relatively new to the country so there wasn't as much familiarity from customers. The financing institutions were also not familiar with solar. So there's a learning curve."


Gold Star Daily

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Oro power supply gets 10-mw boost

By Nitz Arancon
March 18, 2016

THE POWER supply in Cagayan de Oro and parts of Misamis Oriental started receiving a boost with the launch of a new power plant in Villanueva town yesterday.

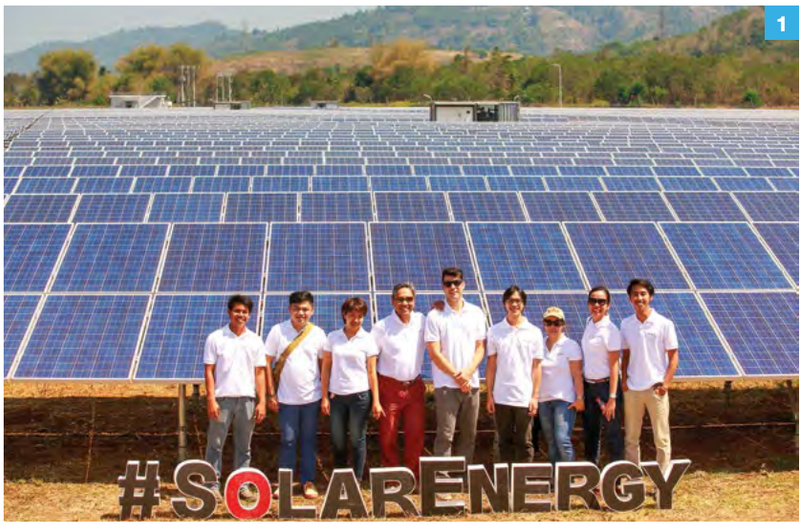
> "The Kirahon solar farm was the first bilateral solar power purchase agreement in the country approved by the ERC."

After months of extensive consultations with ERC in the midst of construction, in May 2015, the shareholders heaved a sigh of relief when the ERC finally approved the 25-year power supply agreement for the Kirahon solar farm. It was the first bilateral solar power purchase agreement in the country approved by the ERC. At a guaranteed rate of Php 8.63 per kwh, the pricing structure assured the shareholders of a good income from the Kirahon solar project.

"The shareholders were understandably nervous waiting for the final ERC decision even after construction had begun. To their credit, ERC carefully analyzed the uniqueness of solar generation between DC and AC generation. This is the challenge that any pioneer has to experience. We were the pioneers in wind with NorthWind, again we're the pioneers in solar with Kirahon. But like before, we didn't give up," says Vince.

Within ten months, on October 25, 2015, the facility began operations, on time and on budget. Nestled on a 15-hectare private property inside the PHIVIDEC Industrial Estate in Sitio Kirahon, Barangay San Martin in the Municipality of Villanueva, the plant has 40,720 units of 305-watt and 310-watt solar panels that provide almost 9,000 households with a clean source of energy every year.

On March 17, 2016, the solar farm had a formal inauguration attended by then Governor Yevgeny "Bambi" Emano of Misamis Oriental. Alternergy also organized a field trip to the site for its ▸



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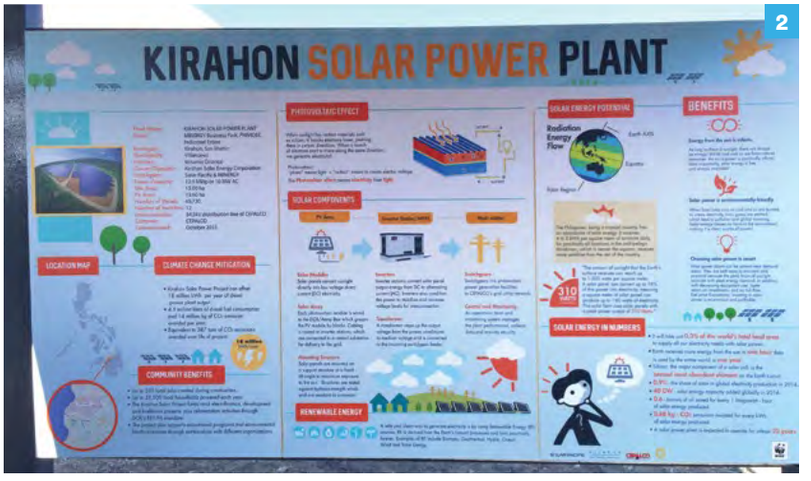

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employees so they could see the company's very first solar project.

In December 2017, Vince swapped his shares in Solar Pacific with Alternergy, which gained majority control of Solar Pacific with 60% of the company. Five years later, in 2022, the Kirahon Solar Energy Corporation became a wholly-owned subsidiary of Alternergy after it bought out most of the original shareholders.

Looking back on those early years, Mike says the Philippine government has improved tremendously in supporting clean energy. "The Philippine government has become very supportive of the RE market by setting targets, such as renewable portfolio standards where they require utilities to get a certain percentage of their energy from renewables so they're creating demand, to fiscal and tax incentives," he says.

The major challenge for solar companies is to look for the right customers, or in business parlance, off-take institutions. These are buyers of clean electricity, in the case of renewable energy. From the start, Mike says Solar Pacific decided not to participate in the government's feed-in tariff program for solar because they found it too risky to build solar projects within a deadline that have no guarantee for end-consumers and are also subject to a quota. Instead, the company looked for bilateral power purchase agreements with prospective clients. "Everything we do is really anchored around having a credit-worthy customer to purchase the energy, so we spend a lot of our time looking for off-takers. Who's going to buy the electricity that we produce from the project once we build it? That's challenge number one – just finding demand and finding the right client," says Reyma Rufo-Alolod, Solar Pacific's Senior Project Developer.

With the entire country's 30 million hectares of land blessed with strong sunlight year-round, it would be reasonable to assume that finding the right location would be a cinch, but it's not that easy. Project sites for a solar farm have to be preferably on a relatively flat piece of land that is not in a flood-prone area. "We conduct hydrological studies to make sure that the project wouldn't be flooded in a typhoon or a heavy rain event. Ideally, we avoid cutting trees when possible, so we prefer areas that are already clear," says Mike. "A lot of the good sites that meet those requirements are often farmland or previous agricultural land, so one of the other main challenges is converting the classification of the land from agricultural to industrial."

This is where the headaches associated with the permitting process come in, with much of the pre-development phase of solar projects caught up in the bureaucracy. For the Kirahon project, a long list of other permits were required from the Department of Energy, Board of Investments, DENR, NCIP, and many other agencies.

Aside from the geological aspects of the location, another factor that solar developers need to check is the proximity of the site to the transmission grid. "We sometimes meet developers who might not realize how critical the interconnection strategy is," says Charles Flores, transmission and electrical systems engineer. "You want to locate the project near where you can connect to the grid. We've seen projects that have great project sites, except they are so far away from interconnection or face grid capacity constraints."

"A critical question is, does the grid at that location have available capacity? It could be overloaded or not have enough room for your project. If it is full, is there any kind of upgrade work that can be done? Could we replace the ▶

1 March 17, 2016: Solar Pacific team (left to right): Dwight Olarit, JL Salinas, Kit Taloza, Vince Pérez, Mike Lichtenfeld, Ryan Bastre, Wheng Olano, Dyna Beuchon, Louie Pangilinan

2 Kirahon Plant Information Kiosk prepared by WWF

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3 May 5, 2016: Formal signing of RCBC Loan with Kirahon Solar Energy Corporation, with RCBC executives led by Mike Aguilar, Beth Coronel, Joey Gomez, and Claudine del Rosario

4 December 15, 2017: Loan Signing with RCBC for Solar Pacific CitySun Corporation, Louie Pangilinan, and Dyna Beuchon

5 July 5, 2018: Team visit to CitySun's rooftop above CityMall Victorias, Negros Occidental

6 October 22, 2019: Awarding of Certificate of Commerciality for Solar Pacific's first four commercial solar rooftop projects by ERC Chair Agnes Devanadera

SOLARQUARTER
ENGAGING. ENRICHING.

Alternergy receives P1 billion financing from RCBC for Solana Solar Farm development in Bataan

By Pooja Chandak
March 3, 2023

ALTERNERGY Holdings Corporation, a pioneer in renewable energy, recently signed a term sheet with Rizal Commercial Banking Corporation (RCBC) for P1.0 Billion financing. This will be extended to the Solana 28-megawatt solar farm in Hermosa (Bataan) development.

transmission lines or build a new substation? It can take quite a while to figure that out. To determine if there's capacity in that area, we usually have to do a series of studies with the utility or with NGCP," says Senior Engineer Mark "Mac" Soriano.

Once the right location and customer are found, financing is the next challenge. On February 26, 2015, Solar Pacific signed its first non-recourse loan agreement with Rizal Commercial Banking Corporation (RCBC) for the Kirahon solar farm. "There was initially a lot of education we had to do with the lender after a long process of due diligence. We were happy to do it then and now, we have benefited from it and have built a lot of trust and track record with them," says Gerry. "Maybe the terms of the financing were a little bit more stringent because there was more perceived risk. But we were very thankful to RCBC's Helen Yuchengco Dee, former Prime Minister Cesar Virata, Gil Buenaventura and Beth Coronel, and proud to have been one of the first to raise that kind of financing."

In the past eight years, the Kirahon solar farm has required very little maintenance, says Plant Manager Oliver Labares, who joined Solar Pacific in 2019, six years after meeting Mike and Vince. Oliver says the only challenge has been replacing parts such as the solar panels, which have a lifespan of 25 years but can get cracked occasionally by falling objects. Depending on the weather, the solar farm produces electricity 6 to 8 hours a day. Power generation is monitored and computed daily, averaging 17 to 18 percent of capacity.

After Kirahon, in 2018, Solar Pacific CitySun was the first to roll out an aggregated portfolio of commercial solar rooftops in the country with a total capacity of 6MWdc above Injap Sia's eight CityMalls throughout Luzon, Visayas, and Mindanao. This will be followed by another six CityMall rooftops for Phase 2. Solar Pacific tapped JUWI to construct the solar rooftops and RCBC was all too pleased to finance this innovative project. ▸

SOLARQUARTER
ENGAGING ENRICHING

Alternergy's Liberty Solar secures operating contract for Apulid Solar Project in the Philippines

By Pooja Chandak
December 14, 2023

ALTERNERGY Holdings Corporation's subsidiary, Liberty Solar Energy Corp. (LSEC), has secured an operating contract from the Department of Energy (DOE) for the Apulid Solar Project in Paniqui, Tarlac.

PVTECH

Solana Solar signs PPA with Kratos RES for new solar power project in the Philippines

By JP Casey
July 5, 2023

PHILIPPINE SOLAR company Solana Solar has signed a power purchase agreement (PPA) with Philippine firm Kratos RES to supply 10-20MW of electricity from its upcoming Solana Solar Power Project in the Philippines.

In the Pacific Islands, where some of the countries that are most vulnerable to the impact of the climate crisis are located, Solar Pacific found a partner in Palau, a former US territory that is known for its dedication to environmental protection.

Vince and Mike first visited Palau in February 2014 to negotiate a power supply agreement with the Palau Public Utilities Corporation (PPUC). However, geopolitics prevailed and a Taiwanese developer got the contract, according to Mike. Palau is one of about a dozen countries that recognize Taiwan as a sovereign country, and although Vince and Mike were disappointed with the decision, they felt the Pacific islands were not yet ready for renewable energy at that time so they looked for projects in the Philippines instead.

Six years later, Solar Pacific went back to Palau after winning a competitive request for proposals that PPUC had issued with the advice of the Asian Development Bank (ADB). In May 2020, Solar Pacific was selected as the First Ranked Bidder for PPUC, Alternergy's first project outside the Philippines. The timing was not ideal, coming two months into the COVID-19 global lockdowns. Mike was stranded in Connecticut, Vince was secluded in Melbourne, while Gerry was confined in Taguig.

The project almost did not get off the ground because it had to meet ADB's stringent environmental requirements. Solar Pacific was required to conduct a critical habitat assessment to ensure that the proposed solar farm would not affect any endangered species or compromise Palau's status as an Important Bird Area. There is an endangered Pacific land snail endemic to Palau, and Vince joked that the project could end up proceeding at a snail's pace. According to Reyma, they found an expert from The Biodiversity Consultancy based in Australia who certified that the solar project would have a mild impact on birds in Palau and could be done with limited safeguards. For the snail study, they found the world's leading Pacific land snail expert in upstate New York who trained a local NGO in Palau via Zoom on how to do an on-site assessment of the proposed area for the solar farm. The first location suggested by the PPUC turned out to be too close to a conservation area and had multiple third-party claimants. Another potential site near the airport was government land, but it was beside a cliff. Finally, the company found a savannah on a plateau owned by a prominent local family, and the endemic species researchers reported that the site had no endangered Pacific land snails or Pacific island ants, which were mainly in the forest. ▶


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7 January 25, 2014: First visit of Mike and Vince to Republic of Palau


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8 May 31, 2023: Vince and Mike with Lex Sant of Sant Foundation and AIFFP's Mick Lilley and Sam Bunt

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9 June 3, 2023: Lex Sant with Knud Hedeager, Vince Pérez, Gerry Magbanua, and Eduardo Martinez-Miranda

10 June 2023: Alex Santella, Vince, Mike and Mark Soriano standing beside SAFT Lithium-ion Phosphate Battery

To comply with Palau's Environment Quality Protection Bureau, "we engaged a renowned local environment specialist to conduct an environment impact assessment. Not a single tree was to be cut, and the solar array layout had to be six meters from the forest's edge," Reyma explained. "We avoided historical preservation remains and had to remove more than 100 unexploded ordnances from the entire project site," Reyma added, since Palau was within the WWII Pacific war theater.

While the scientific studies were being conducted, Solar Pacific began looking for other sources of project financing when the ADB's responses slowed down. In what was basically a cold call, without the benefit of any referral, the company sent an email to the Australia Infrastructure Financing Facility for the Pacific (AIFFP), which sent a surprised response after a few months. Typically, most project referrals are often coursed through third parties such as banks. "It was the very first project that they received by email through their inbox," Mike says. The Australian government, up to Cabinet level, approved the proposal from Solar Pacific, and after receiving an all clear from the habitat assessment studies, the term sheet was signed in September 2020.

Looking for other investors in the new venture, Vince reached out again to his mentor Roger Sant, whose foundation had invested in Kirahon and CitySun. Roger and his family had gone diving in Palau with Vince. "Roger was most fascinated with Palau because of his advocacy for the ocean. And he was happy that Palau was one of the first to sign up for the Paris Climate Treaty and had actually set aside one of the largest marine sanctuaries in the Pacific," explains Lex Sant, President of Sant Foundation. Roger even hosted Palau President Surangel Whipps, Jr. at a WWF dinner in New York on the sidelines of the U.N. General Assembly. Together with other investors, they created a company in Palau called Solar Pacific Pristine Power, Inc. (SPPPI) and signed a shareholders agreement on April 30, 2021. In the same month, the company signed a Power Purchase Agreement (PPA) with PPUC for the Palau Solar and Battery Storage Project.

As the main lender, the Australian government wanted some assurance that the polysilicon solar panels for the project would not be sourced from forced labor camps of the minority Uighur Muslims in Xinjiang province, which the G7 countries had flagged for reported human rights abuses. Solar Pacific had made its bid on the assumption that the cheapest polysilicon solar panels would come from China, so they asked their prospective suppliers for assurance that none of the polysilicon materials would come from Xinjiang. The solar module companies explained that the Chinese government ▶

> "Solar energy is a flexible technology that allows you to deliver electricity to more remote places, especially island communities that are not connected to the main grid."


ISLAND TIMES
Palau
TUESDAY
Australia announces USD22 million solar farm project plan in Palau

11

12

11 **December 3, 2021:** Palau news article on visit of then Foreign Minister of Australia Marise Payne

12 **December 15, 2022:** Left to right, President Surangel Whipps, Jr. of the Republic of Palau, Australian Foreign Minister Penny Wong, Vince Pérez, and Australian Senator Simon Birminghan during the Australian Bipartisan State Visit

SOLARQUARTER
ENGAGING. ENRICHING.

Alternergy and Solar Pacific inaugurate Palau's largest solar PV + battery energy storage system project

By Pooja Chandak
June 5, 2023

RENEWABLE POWER pioneer Alternergy Holdings Corp. (Alternergy) and its subsidiary Solar Pacific Energy Corporation (Solar Pacific) inaugurated the Republic of Palau's first solar PV + battery energy storage system (BESS) project and the largest to date in the Western Pacific region. Republic of Palau's President Surangel Whipps, Jr., Australian Ambassador to the Republic of Palau Richelle Turner and officials and executives of Alternergy, Solar Pacific and Palau Public Utilities Corporation (PPUC) led the inauguration ceremony.

prohibited them from issuing such a letter because the authorities felt it was an overreach by the Western countries.

To overcome the stumbling block, Solar Pacific would have to get more expensive solar panels from other countries that were using a different technology. "We were trying to find ways to lower the cost and the only way we could make it doable was to find concessional financing to reduce the cost of the debt which would allow the project to be viable for equity investors," Gerry says. The company was facing difficulties until finally, the Department of Foreign Affairs and Trade of the Australian government agreed to give a grant that would subsidize the higher cost of a different cadmium telluride PV module from First Solar of the US.

Solar Pacific tapped JUWI again as the contractor, and they were in a hurry to complete the project due to the rising cost of materials. In the US, President Biden had signed an ambitious climate law that poured millions of dollars into renewable energy projects, so competition was heating up for supply materials. To lock in the pricing for the solar modules and battery, Solar Pacific and other shareholders decided to advance their investment and sign an early works agreement with JUWI in December 2021 to pre-order the First Solar modules and SAFT battery.

A few more obstacles for the solar project remained, including new tax rules that would drive the cost of business higher. "We bid for the project based on Palau's prevailing zero tax regime but the new Palau Goods and Services Tax (GST) law would reduce the projected equity returns. The Ministry of Finance under Finance Minister Kaleb Udui eventually exempted SPPPI because it's a critical infrastructure project," Mike says. Another stumbling block was the right-of-way negotiations with local clans that would be affected by the transmission line. Palau's national officials intervened to resolve the issue. ▶

ETN BUZZ ENERGY STORAGE E-MOBILITY RENEWABLES HYDROGEN EME

Alternergy installs Palau's largest solar and battery energy storage system

By Dhiyanesh Ravichandran
June 23, 2023

PHILIPPINE RENEWABLE energy firm Alternergy and its subsidiary Solar Pacific Energy Corporation (SPEC) have recently launched the Republic of Palau's first solar and battery energy storage system (BESS) project in Ngatpang state on Babeldoab island.

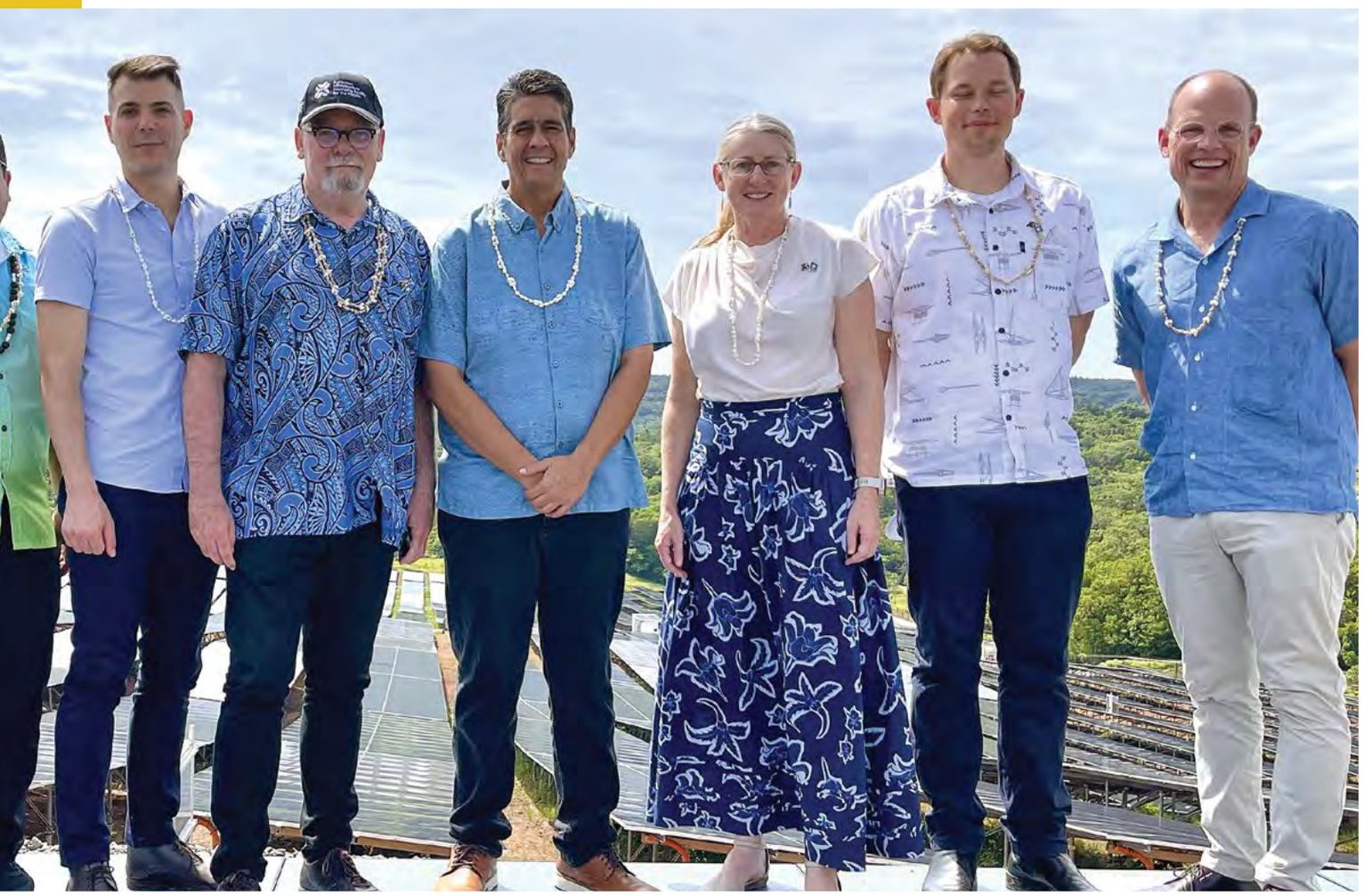
When Australian Foreign Minister Marise Payne visited Palau on December 3, 2021, the $29 million solar project was announced and made headlines. By early 2022, a new concern was that the Australian administration was about to call federal elections which may lead to a new set of government approvals. With material costs rising, a sense of urgency prevailed upon Solar Pacific to submit all conditions to a loan signing, but a complicated insurance report was taking an excruciatingly long time to be finalized by the lender's insurance advisor. Gerry had to arrange daily consultations between the insurance analyst in Singapore and the insurance broker in Guam, while Vince appealed directly to the CEO of the insurance advisor to fast-track the final report. The loan agreement with AIFFP and Export Finance Australia was finally signed on January 20, 2022.

Construction of the solar plus battery project began in April 2022 and on July 18, 2023, the Palau Solar Battery project was finally energized. Engineer Alex Santella, who led the technical design for the solar and battery storage facility, says the project will contribute more than 20% of the energy needs of Palau. With a population of 18,000 and power requirement of 11 MW, Palau relies mostly on diesel generators. The 15.3 MWdc plus 12.9 MWh Battery Energy Storage System is anticipated to deliver up to 23,000 megawatt-hours per year to the grid network. This will help to reduce Palau's dependency on imported diesel for power generation, Alex says.

"The Palau project is our first project outside the Philippines. It's also our first solar hybrid project with a battery system. In fact, we just concluded negotiations for a second solar battery project." Vince says. With two more upcoming solar projects, Solana Alpha's 28 MWdc in Hermosa, Bataan and Liberty Solar's 68 MWdc aqua-voltaic project in Paniqui, Tarlac, Solar Pacific's project pipeline is full for the coming years. Finally, Alternergy's vision from 2006 is slowly turning into reality. ■

13 Left to right: Vince Pérez, PPUC CEO Frank Kyota, BOD Chairman Ngiratmetuchel R. Belechl, Mike Lichtenfeld, Mick Lilley of AIFFP, Palau President Surangel Whipps Jr., Australia Ambassador Richelle Turner, Sam Bunt of AIFFP, and Lex Sant of Sant Foundation

14 The Palau Solar Battery Plant, located in Ngerdubech Hamlet, Ngatpang State, Republic of Palau the largest such project in the Western Pacific



15 Solar Pacific team with President Whipps: Reyma Rufo-Alolod, Alex Santella, Rex Morgia, Mark Soriano

16 Eric and Joy Whipps, Maria and Vince Pérez, Catherine Byun and Mike Lichtenfeld

17 Palau Solar Battery Plant Information Kiosk

18 The Australian, Palau, Philippine, and USA Flags representing the Project's stakeholders

19 **November 9, 2022:** At Solana solar site. Left to right: Reyma Rufo-Alolod, Gerry, Mike, and Vince

20 **July 4, 2023:** Solana Power Sale Agreement with Kratos Energy

21 **May 11, 2023:** Liberty Solar Energy Corporation lease option signing with Josephine Cojuangco Guingona with Attorney Marjorie Arias, Gerry, and Reyfel Maglines

22 **November 8, 2023:** Alternergy's Ina Arriola, Reyma Rufo-Alolod, and Snap Lopa with Paniqui Mayor Max Roxas

23 Fish farm in Paniqui, Tarlac, future site of Liberty Solar's aqua-voltaic project. It's the first initiative in the country that promotes both energy security and food security in one project

24 **April 13, 2024:** Negotiations with Pacifica Royale property in San Miguel, Bulacan. Left to right: Mabel Cudiamat, Vince, Alvin Dee and Nancy Ty of Pacifica, Reyma Alolod (standing)

25 **June 6, 2024:** Lease Option signing of Tacurong property. Left to right: Ina Arriola, Mike, Jose Lagon of JV Lagon Enterprises, Gerry, and Mrs. Lisa Lagon

PRO TIPS

1 Be creative and flexible

Mike shares: "It's one of the things that I think is really one of the strengths of Alternergy and Solar Pacific. We're just the right size and we're very close as a management team, especially, but as a company overall. We can easily and quickly make decisions, we can be flexible, we can get creative.

"The more you do projects, the more you anticipate what might come up to bite you on the next projects. So for every new project, we now understand what are some of the most key factors we should look at first. That might be everything from quickly assessing our interconnection strategy early in the process so that it doesn't become a problem later, or talking to contractors and suppliers to get pricing early on so we know what the economics will be like."

2 Build lasting partnerships

Mike adds: "One example of lasting relationships is one of our lenders, RCBC. We work with a variety of lenders but in solar we've worked a lot with RCBC's corporate banking team on our project financing and so of course we say, why not just build on that relationship? We know what their loan agreement is going to look like, we know what kind of due diligence we can expect from them, so instead of just recreating the wheel somewhere, why not do repeat business if possible. The same is true with AIFFP of Australia, who we are continuing to work with throughout the Pacific region. That's even true with our contractors and law firms with whom we do repeat business." ■

Alternergy's senior executives met with RRLR Law Firm partners Melissa Rosario-Lichaytoo and Attorney Sherleen Macatangay, corporate counsels to Alternergy and Solar Pacific since 2008

Chapter 4

Power from the River

> “Hydro generation is basically available 365 days of the year, unlike wind that is seasonal or solar that is only daytime. Because it is a resource that is year-round, hydro has a special place in renewables.”

In the mountains of Ifugao and Nueva Ecija in northern Luzon, swift-flowing rivers run down the slopes of the Cordillera and Sierra Madre mountains towards fertile farmlands in the lowlands.

These gurgling waters provide food and livelihood to indigenous communities and other upland dwellers, and soon, a reliable source of clean energy for residents downstream.

Hydropower is the oldest form of renewable energy and was first used in the mid-1700s in Europe. Across the Philippines, many people associate hydroelectricity with huge dams that can cause massive floods during heavy rainfall. However, there is a more benign form of hydropower using run-of-river technology that does not require large impounding structures and instead, allows the gravity of water flowing from the mountains to drive turbines in powerhouses and produce electricity.

In 2014, Vince invited his good friend and business partner, Eduardo Martinez-Miranda, to join Alternergy's hydropower venture. Also a former investment banker, Eduardo had been exposed to more sustainable types of businesses such as renewable energy when he joined the International Finance Corporation, the private sector arm of the World Bank. He had also invested in the sustainable tourism business of Vince in Palawan, so when he was asked to look at the renewable projects, he was receptive to the idea. "I thought, yeah, I wanted to move on from the role of just being a financier to see where I could build something. I thought that was a neat segue from me doing sustainable finance at IFC to ▶

developing a project. I see hydro projects having a greater development impact in far-flung areas mostly inhabited by our indigenous communities," Eduardo says. Joining Eduardo in Alternergy's run-of-river platform were Annette Rafael, former DOE Assistant Secretary with extensive experience in government affairs and hydro; Julius Sturm, an engineer with experience in hydro and water projects in Africa and the Philippines; Vangie Moises, formerly with the DOE; Ruffa Linchoco, hydro project coordinator; and dedicated teams based in the project sites.

Alternergy embarked on a series of discussions with potential investors, but for a variety of reasons, no agreement materialized. The first talks were held with Berkeley Energy, a private equity fund based in London that had renewable energy investments in Africa and Asia. They signed a term sheet in February 2013 but failed to arrive at a mutually acceptable commercial arrangement. Next came the Armstrong Southeast Asia Clean Energy Fund, but once again, the deal fell apart. A year later, in February 2014, they pitched the run-of-river project to Equis Funds, which had already invested in the Pililla wind farm, but the fund decided not to go into hydro. Vince and Eduardo also had a meeting with the private investment firm Olympus Capital, flying to Hong Kong in January 2016 to meet their friend Frederick Long, who was very interested but negotiations also went nowhere. The construction company CityCore, a subsidiary of Megawide, signed an MOU with Alternergy in June 2016 but the deal did not progress any further.

During this challenging pre-development phase of the run-of-river projects, Vince reconnected with Allard Nooy, a former Merritt Partners client. Allard had recently joined as head of InfraCo Asia, a development finance company based in Singapore that supports private sector initiatives contributing to sustainable economic growth. InfraCo Asia gets funding from the governments of Australia, the Netherlands, Switzerland, and the UK. "They're not just about making money but also about having a social and developmental impact," says Vince.

On August 14, 2015, Alternergy signed a term sheet with InfraCo Asia for soft loans that would help the company develop Dupinga in Nueva Ecija as well as three run-of-river projects in Kiangan, Lamut, and Asipulo in Ifugao province. "They proposed to provide convertible loans, with an option to convert that to equity or be repaid with interest," Eduardo says. After months of due diligence, the co-development facility was finalized on April 28, 2016. "They agreed to extend $2 million and that was enough for us to get started with our run-of-river platform," adds Eduardo.

Meanwhile, Vince got reacquainted with Joey Leviste, the former chairman of Mirant Energy whom he met during his time as Energy Secretary. Leviste had interests in mining, with strong connections to an Australian company. Leviste had set up a company called Constellation Energy ▶

INFRACO ASIA | PIDG

InfraCo Asia enters joint investment and development agreement with Alternergy for Philippines hydro power projects

May 5, 2016

INFRACO ASIA Development Pte. Ltd. (IAD) is pleased to announce that on Thursday 28 April 2016 it entered into a Joint Investment and Development Agreement (JIDA) and a Convertible Loan Agreement (CLA) with Alternergy Hydro Partners Corporation (AHPC), a developer of renewable energy projects based in Manila, Philippines.

▶ **May 4, 2016: Vince finalizes InfraCo Asia co-investment deal for Alternergy's Luzon hydro portfolio with Allard Nooy, CEO of InfraCo Asia**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that obtained a service contract for a run-of-river project in Gabaldon, Nueva Ecija. Alternergy signed an MOU with Leviste on September 18, 2012 for a joint venture to develop a mini hydro project in Dupinga River.

In 2016, Alternergy brought in the power generation firm Markham Resources Corporation led by Francisco Tiu Laurel and Dexter Tang as the majority investor in the Dupinga project. Markham had been referred by Investment and Capital Corporation of the Philippines, a financing institution, who would later play a significant role for Alternergy in 2022. The investment agreement was finalized on September 29, 2016 with Markham holding 55% of the shares, Alternergy 30% and Constellation Energy with a minority stake in the Dupinga Mini Hydro Corporation (DMHC).

Initially, there was some resistance from local stakeholders because of rumors that the hydro project was a mining business in disguise, due to the involvement of Leviste. "We had to reluctantly buy them out because their involvement was creating a misconception," says Vince. Fortunately, the project had strong support from the municipal government so it went on as planned.

On August 9, 2019, the Development Bank of the Philippines signed a financing agreement to provide P660 million for the Dupinga project. "Among our project lenders, DBP understands the unique characteristics of hydro projects in ancestral domains of indigenous peoples, and they provided a concessional interest rate for our Dupinga project," says Gerry.

"We're providing reliable, cheap, clean, environmentally friendly power to the province of Nueva Ecija and improving the quality of the power supply in Gabaldon and even in Dingalan in the province of Aurora," Eduardo says. "In addition, as a hydro project, we are protecting the watershed through tree planting and reforestation. We employed a lot of employees from the indigenous people during the construction period."

The mountains of Gabaldon are part of the ancestral homeland of the Dumagat indigenous people, and any project in the area had to obtain their Free Prior and Informed Consent (FPIC) through the National Commission on Indigenous Peoples (NCIP). The impact of the hydro project on freshwater eels, one of the sources of livelihood for the Dumagat, that migrate up the rivers had to be studied. A fish ladder will be placed on the ▶

1 September 18, 2012: MOU signing on Dupinga project with Constellation Energy's Joey and Jojo Leviste, with Vince, Gerry and Toni de Guzman

2 July 5 2019: Left to Right: IPMR Randy Casamis, Mayor Jobby Emata, Councilor Adel Manabat, Councilor Medy Valdez, Annette Rafael, Wheng Olano, JM Mariano, and Councilor Macasieb

3 March 1, 2019: Dupinga site visit by DBP officers Rizalino Olandesca and Patrizzia Sevilla with Gerry, Eduardo and Charles Flores

INQUIRER.NET

Nueva Ecija hydropower facility taps P660-M funding from DBP

By Jordeene B. Lagare
July 21, 2022

THE DUPINGA run-of-river hydro project in Nueva Ecija got a funding boost from Development Bank of the Philippines (DBP), enabling Dupinga Mini Hydro Corp. (DMHC) to complete the planned renewable energy facility in about two years.

▲ **September 29, 2016:** Dupinga Mini Hydro Corporation investment agreement with Francisco Tiu Laurel, Dexter Tang, Markham Resources and Constellation Energy, arranged by ICCP

January 14, 2015: Top and above, MOU negotiations with Dumagat and NCIP on the riverbanks of Dupinga River

weir so that the migration of the eels will not be affected, explains Chito dela Cruz, community relations officer for the Dupinga Project. The forested area is under the control of the Department of Environment and Natural Resources (DENR), so there were very few land claimants.

On January 14, 2015, along the riverbank of Dupinga River, a memorandum of agreement was negotiated with the Dumagat dwellers in the Gabaldon section of the Sierra Madre mountains, The forum was supervised by the NCIP. "This was our first experience working with indigenous peoples," Eduardo says. Every paragraph in the document was read in English, Tagalog, and the Dumagat Remontado language. Many of the community members affixed their thumb marks to the *Kalatas ng Kasunduan* (memorandum of agreement) when they finally gave their consent to the project. In July 2016, the national commission en banc of the NCIP ratified the agreement.

In 2017, the DOE approved the transfer of the Dupinga Hydro Service Contract and the exclusive right to develop the project from Constellation Energy to DMHC.

The company went through a complicated paper chase to get the required government approvals and permits before any work could be done. At the local level, endorsements were needed from the barangay to the municipality to the provincial government. There were zoning certificates, locational clearance, building permit, construction permit, and even a unique requirement in Nueva Ecija for a local environment clearance certificate. Although the Supreme Court had issued a ruling that provinces have no authority to require such a certificate because it is the sole responsibility of the DENR, a national agency, DMHC went ahead and complied with the request of the local government.

For land reclassification from agricultural land to industrial renewable energy use, clearance from the municipal government, provincial government, and the Department of Agrarian Reform were needed so that a power station could be built. "We conducted a land tenure study to find out who owns which lot. We acquired multiple land rights for the project to cover all fronts. Aside from undergoing FPIC and signing a MOA with the Dumagat, we also signed long-term land lease agreements with farmers that have been granted Certificate of Land Ownership Award (CLOA) ▸

by DAR. We also obtained a tenurial instrument from DENR for the project site," says Annette. The Department of Public Works and Highways also provided consent for right-of-way along the river easement and 300 meters alongside the National Road for the transmission line.

One of the most important permits came from the National Water Resources Board, which controls the use of water in the country for various purposes, including hydro projects. For the Dupinga run-of-river project, water from the river flows through a conveyance water channel called a headrace to the powerhouse, where it drives turbines to produce electricity. "One of our requirements is that after the water passes through the conveyance channel, we discharge the water back to the river. We do not construct a dam, because we don't like to build reservoirs that flood villages and towns and have an adverse environmental impact," Knud says. "We release back the water right before the irrigation weir of NIA, the National Irrigation Administration, that diverts it for irrigation. Nueva Ecija is a major rice granary of Central Luzon so a lot of rice fields are irrigated."

The International Convention on Large Dams has a limit of 15 meters in height for water impoundment of small run-of-river hydro projects. "We limit the height of the weir, similar to a large swimming pool with a cement wall that catches the water. The water flows over the top of the weir and a slight drainage captures the water that is diverted into the conveyance channel which is like a slide in an amusement park and it runs down hundreds of meters downhill. The longer that downhill slide, or the technical term is headrace, the more energy that can be tapped from the force of gravity. At the bottom of the headrace is a powerhouse where the turbines are waiting for the water," says Eduardo.

Eduardo Martinez-Miranda along Dupinga River

In 1991, Gabaldon was one of the worst-hit areas in a powerful earthquake in Luzon, so a geohazard assessment was done to make sure that any faults are avoided. "That was a big concern and we had to educate the public multiple times to explain to them what the impact of an earthquake would be, or what we call weir structural break assessment. Meaning, if there was a leak in the weir, how much flooding would have to happen and since the weir is upstream, by the time it hits any populated area several kilometers downstream, the impact is only a few centimeters higher than river elevation," Eduardo says. To ensure the safety and stability of the site, three geotechnical and geohazard investigations were undertaken by Metro Construction, Oremet Construction, and GHD Pty of Australia.

"The Philippines is prone to earthquakes, so you obviously have to build a structure which would be able to withstand a certain magnitude of earthquake," says Eduardo. "You also choose the area where it's geotechnically stable. I won't say that earthquakes are not going to affect the project, but it must be a significant earthquake that would definitely affect the project."

To determine how much hydropower could be generated from Dupinga River, an engineering company called PacificTech Solutions conducted a hydrological review that analyzed seasonality and rainfall data. "Each river is unique and the challenge in hydro is that there are months where the river is surging, it's bursting. There are months where it's very low. It's very dry. Part of the special expertise of developing run-of-river projects is, what is the optimum size you should build a hydro plant? You want to make sure that even during the dry months, even though the river is low, that a certain amount of hydro power is being produced. You may not want to build a very large hydro project based on the rainy season because you will be overbuilding.

"The optimal size to build a mini-hydro plant is with 55% to 60% capacity factor for the power plant to operate throughout the year, meaning there are months where it's less than 50% and there are months where it's running at 100% but combining for the whole year's output, it should ▶

BusinessWorld

Alternergy's Dupinga Mini Hydro secures power supply deal

By Ashley Erika O. Jose
September 6, 2022

DUPINGA Mini Hydro Corp. (DMHC) recently signed a deal to supply renewable power to an electric cooperative in Nueva Ecija.

have an annual capacity factor of 55% to 60%," Knud says.

Multiple technical studies were done to come up with an ecological study and sustainability plan and watershed management plan. "Of course, everything we do has to have a lighter footprint. How do we protect the watershed? By making sure there's enough forests, we'll be able to capture water down the river," Vince says.

One downside of hydro is that it's very much site-specific. "Because a valley, a river valley or ravine is of a particular shape, a lot of civil works is involved, a lot of construction, so it takes longer to build a hydro plant," says Vince.

Once feasibility was determined, a detailed engineering design was done to determine where to put the various structural components of the project such as the weir, desander, headrace, forebay, penstock and power station in such a way that the natural slopes are meticulously followed and the beauty of the forest environment is preserved. The Dupinga weir is located four kilometers from the powerhouse, which will be connected to the transmission lines of the local power utility 300 meters away.

> "The Dupinga run-of-river project will serve as a major infrastructure investment in the 3rd class municipality of Gabaldon."

In January 2020, a civil works contract was awarded to the consortium of United Hydro Power Builders, BS Ligsay Engineering, and AIP Construction. The water turbines were delivered by Gugler Water Turbines of Austria. Petco Renergy Corporation will assist in the turbine installation as the project's electro-mechanical onshore supplier. The groundbreaking of the Dupinga mini hydro project followed in June and construction began on July 1, 2020.

An important part of the project was the bilateral negotiation with the local energy utility, says Eduardo, and finally, on May 8, 2023, the Nueva Ecija Electric Cooperative II Area 2 (NEECOII Area 2) signed a 4.6MW power supply agreement with DMHC. The power distributor agreed to pay a fixed price of P6.43 per kwh for 20 years and also invested 11 percent equity in the project.

Once completed by 2024, the Dupinga run-of-river project will serve as a major infrastructure investment in the 3rd class municipality of Gabaldon and is expected to provide an impetus towards an inclusive socio-economic growth in the municipality.

In the heritage town of Kiangan, the project location is more complicated because the run-of-river project requires building several structures along a Y-shaped area adjacent to the rice terraces of indigenous communities.

At the Alternergy office, Eduardo points to a map of the Kiangan project site showing the Asin and Hungduan Rivers as two branches feeding into the Ibulao River. The design involves the construction of two weirs upstream and letting the waters from Asin and Hungduan rivers flow into a conveyance channel towards the intersection where both rivers meet. "The channel leads to a powerhouse and by force of gravity, it powers the turbine, after which the water is then brought into another channel leading to the Ibulao powerhouse and again, it powers by force of gravity," Eduardo explains. "After that, the water will be released back into the river."

4 **March 16, 2017:** Welcome ceremony for Alternergy Hydro in Kiangan, Ifugao; Ifugao dance with Kiangan Vice Mayor Roel Francis Dulnuan

5 **March 2017:** Alternergy Hydro supported the Kiangan Heritage Center, guided by Elder Mrs. Maria Galleon

6 **Alternergy Team wrote prayers on paper boats and floated them down the Kiangan river**

Among the technical studies conducted on the three rivers were a Comprehensive Feasibility Study, an Optimization Study, Hydrology Revalidation, Grid Impact Study, Facility Study and Detailed Engineering Design.

Project engineers led by Julius Sturm determined that the combined flow of the Asin and Hungduan Rivers, as well as their aggregate force that would feed into the Ibulao River powerhouse, would lead to a greater overall power output of up to 17.4 MW for the run-of-river mini hydro complex.

"Developing run-of-river projects is the most challenging among renewable energy technology because you are dealing with water. Considering that the Philippines is normally visited by many typhoons every year, the momentum of civil works is disrupted during typhoons. Since run-of-river projects are found in mountainous areas, there are many unknown factors that cannot easily be determined during the detailed engineering stage due to thick vegetation. To mitigate this, you really need to do a detailed ground topographic survey. Years of ground research in hydrology, geological, and geotechnical investigations are needed before pursuing a hydro project," says Eduardo.

The Kiangan Project is located inside the ancestral domain of the Tuwali indigenous communities in Ifugao province. "There are approximately 250 land claimants within the project site from whom we secured land rights and we patiently observed their cultural way of ▶

7 April and June 2017: Annette Rafael leading community consultation with Gabaldon barangays

8 May 31 2018: MOU with the Tuwali Indigenous Peoples of Kiangan

9 October 23, 2019: MOA with Indigenous Peoples of Asipulo Ancestral Domain with Eduardo, Sharon Sarol-Buyagawan and Kim Pagdilao

10 April 7, 2021: Remote signing of Kiangan Investment Agreement with Sta. Clara and Renova in the midst of COVID-19-related travel restrictions


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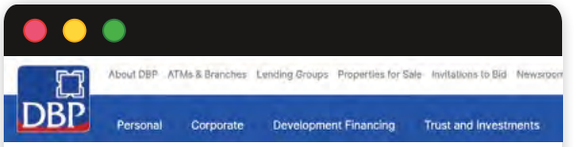

DBP bankrolls Kiangan Mini Hydro Project in Ifugao

July 21, 2022

STATE-OWNED Development Bank of the Philippines (DBP) is extending up to Php2.6 billion funding facility to Kiangan Mini Hydro Corporation (KMHC) for the development of the Asin-Hungduan and Ibulao1 Mini Hydropower Projects (the "Kiangan Project") located in Kiangan, Ifugao, a top official said.

POWER PHILIPPINES

Alternergy gets water permit for Ifugao hydro project

February 21, 2023

ALTERNERGY Holdings Corporation has secured a water permit for its planned run-of-river hydropower project in Ifugao.


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certifying rights on each parcel of land," says Sharon Buyagawan, ESG and CSR Manager for the Ifugao hydro projects.

Annette Rafael, who was recruited to become the Vice President of Alternergy Mini Hydro Corporation, agrees that there are more challenges in Kiangan than in Dupinga. "It's mainly from the 'social fence', with overlapping titles and claims in the ancestral domain," she says. Aside from the long-term land leases, there are claims for crop damages, tree compensation, and other costs. "Before we commence our projects, we make sure we obtain consent from our host communities including the indigenous peoples, for them to fully understand and embrace our advocacy for sustainable energy," Annette added.

"Another major challenge in developing run-of-river projects, like Kiangan and Dupinga, is in the realm of regulatory approvals," Annette continued. The complex and lengthy permitting process is a common complaint among hydro ▶

11 **September 13, 2023:** Lamut project planning session led by Eduardo Martinez-Miranda

12 **April 7, 2022:** Kiangan Project Planning Workshop with Sta Clara International executives led by CEO Nick Linao

13 **June 7, 2023:** Courtesy call on DBP President Mike de Jesus

project developers. Multiple permits, clearances and approvals are required before one can commence development and construction of a project. Many months are spent on securing these regulatory approvals from various government agencies, local government units and host communities. "We painstakingly adhere to government regulations. We make sure we obtain all necessary and relevant approvals before starting construction works for our projects," says Annette.

Having held senior positions with several government agencies including the DENR and DOE, Annette is familiar with bureaucratic hurdles, although she has found it strange to be on the other side of the fence. After many years as a regulator, she has become a project proponent in her new role, which allows her to make government officials aware about the constraints in developing energy projects. "Regulators don't see the urgency in the government approvals that we as developers need for our projects," Annette says. "This is a challenge, and so whenever we follow up on certain government approval, we tell them that we understand their processes, we know their concerns because we were there before, and thus we need to help each other." Her government experience has helped the team obtain permits more efficiently.

Project ownership was transferred to the Kiangan Mini Hydro Corporation (KMHC) in 2013. The DOE approved the transfer of Hydro Service Contracts over the three rivers to KMHC in 2015.

In April 2021, Renova Renewables of Japan and Sta. Clara International signed an investment agreement for the Kiangan Mini Hydro project.

To pursue development of the Kiangan project, Alternergy engaged with Sta. Clara International Corporation, a Philippine construction engineering firm led by Nick Linao with substantial experience in hydro projects, to undertake the civil work, Gugler Water Turbines of Austria for the Electro- ▶

▲ **March 15, 2022:** Lamut Hydro Investment Framework with Exeter Holding's Sara Soliven de Guzman

Mechanical work, and MN Electro for the transmission line. To help supervise and manage these contractors, PacificTech Solutions was appointed as Owner's Engineer.

The Development Bank of the Philippines granted a loan of Php 2.65 billion for the completion of the Kiangan hydro project, which is seen as the biggest infrastructure development in Ifugao province. Construction is in full blast and the first kilowatt hour generation is expected by 2025.

Compared to wind and solar, which have a shorter lifespan, one of the advantages of hydro projects is that they can last 40 years and more, a major consideration on the business side. There are hydro projects around the world that are still running for about 80 years. Annette, who started the Dupinga project when she was still with Constellation Energy, says, "Hydro is an old technology that is established and stable. You just have to look for the right place."

Eduardo emphasized a key advantage: "Hydro generation is basically available 365 days of the year, unlike wind that is seasonal or solar that is only daytime. Of course, it produces more during the rainy season but during the dry season it really doesn't dry out completely. The flow will be less, but you still have the capacity to generate power. Because it is a resource that is year-round, hydro has a special place in renewables." ■

MANILA BULLETIN

Alternergy, Exeter partner for Ifugao hydro project

By Myrna M. Velasco
November 4, 2022

TRAILBLAZING renewable energy developer Alternergy has cornered a new partner in Filipino-owned Exeter Portofino Holding for its planned run-of-river hydropower project in Lamut and Asipulo municipalities in Ifugao, a landlocked province in northern Luzon.

PRO TIPS

1 **Find the right investor**
Initially, Alternergy encountered difficulties in getting financing for hydro projects, particularly in finding investors that shared their values and vision. By tapping their connections, they found a new partner in the development finance company InfraCo Asia, which provided startup funds for their first project in 2016. Five years later, on September 1, 2021, the company repaid InfraCo Asia with money raised from investors for the Dupinga and Kiangan projects. “That investment was the first investment of InfraCo Asia in the Philippines. We had a very happy collaboration with InfraCo Asia,” Vince says.

2 **Respect local customs**
With the run-of-river projects located in the ancestral domains of indigenous peoples, the company needed personnel who understood the local culture and traditions. Project coordinator Ruffa Linchoco says their community relations officers in Dupinga, Kiangan and Lamut provide vital support especially in navigating the land acquisition process. “They have a Council of Elders that certifies which person owns a certain piece of land, so we honor their family ties and local customs to maintain harmonious relations with host communities,” she says.

3 **Clean energy leads to economic progress**
Although the company ran into countless challenges with its Kiangan run-of-river project, a major source of strength is that local leaders, from the barangay and municipal to the provincial level, are supportive because it is expected to improve the socio-economic life of the Tuwali people in the municipalities of Kiangan and Lagawe. “When we build the project, we are also building roads and bridges, so it's really a major boost to their economy,” says Eduardo.

4 **Hire locals**
Vince emphasizes an important point: “One of the keys to our success is that we always hire local people as part of our CSR team. We cannot just assign people from Manila. We must have people who speak the language so we can really gain the trust of our host communities. Not only that, in Kiangan we hired from different tribes because they are all distinct from each other.” ■

Chapter 5

Four Pillars of Success

“Alternergy has a Quadruple Bottom Line philosophy centered on the principles of profitability, carbon reduction, community benefits, and employee fulfillment. This is the heart and soul of Alternergy.”

September 20, 2012: Host Community Project in Brgy Halayhayin, Pililla Rizal

On a balmy Saturday afternoon, enterprising young men can be seen directing cars to a parking lot outside the visitors' center at the Pililla wind farm. Souvenir shops and food stalls line the road where a parade of vehicles has descended, weekend visitors eager to see the white giant wind turbines dotting the landscape.

A group of employees from Alternergy joins the excited crowd inside the compound. Their presence completes a tableau that neatly sums up the company's four-pronged approach to business — the wind turbines providing a clean source of energy, the local community earning an income from tourism, the staff getting a rare glimpse of a project site, and the transmission lines representing the value that investors are getting from the enterprise.

While most companies measure success primarily through profits, Alternergy goes beyond money to include people and the environment in the equation. When he co-founded the firm that would become Alternergy, Vince was already deep into another business venture, the Asian Conservation Company, which bought the Ten Knots resort in El Nido in Palawan. Its goal was sustainable tourism and it had what the founders called a quadruple bottom line — financial growth, environmental stewardship, community engagement, and employee satisfaction.

Vince sought to replicate the template at Alternergy, with a greater focus on climate impact when it comes to protecting the environment. The result is a Quadruple Bottom Line philosophy centered on four principles: profitability, carbon reduction, community benefits, and employee fulfillment. "This is the heart and soul of Alternergy," says Vince. ▸

As pioneers in renewable energy, the co-founders knew it would take a while to make substantial earnings from the business. Alternergy President Gerry Magbanua recalls their early difficulties when they embarked on fundraising trips abroad with grandiose ideas and no track record. Together with Knud and Vince, he was part of the roadshow to Morocco, New York, Singapore and other places where they chased potential investors.

An accountant by training, Gerry worked for a power company that had been his client before a mutual friend introduced him to Vince. His exposure to the energy industry made it easy for Gerry to embrace the opportunity to be part of Alternergy at a time when government policies were becoming more favorable for clean energy. The Electric Power Industry Reform Act (EPIRA) of 2001 had promoted more indigenous and environment-friendly energy sources to reduce dependence on imported fossil fuels. In 2008, the renewable energy law amplified the policy further with incentives for power producers developing clean sources of electricity. "It's a pioneering leap. I could be in an industry where everything is new and we could help shape how that industry would actually look like," says Gerry.

With his nine-year experience at a company operating a coal-fired power plant in Quezon province, Gerry was in a unique position to explain the pros and cons of the energy industry from contrasting perspectives. "I could actually sound more credible, in a way, because I've seen it from both sides. If somebody asks, 'how does renewable energy compare with fossil fuels?' I could tell the difference with confidence because I've been there. I've seen it," he says.

Lack of funds did not deter the co-founders, who pooled their individual strengths to create a cohesive team. "Our business model in the beginning has been to grow step by step," says Gerry. "Because we didn't have the capital to take on majority ownership of our projects, we would take what we call a free carry interest. It's like sweat equity. It's not financial — we contribute our skills, our talents, our work, our time and in exchange, anywhere between 10 to 15 percent is usually what we get from the project that we develop. And then of course, as part of our commercial deal, we get reimbursed for past expenses that we incur like permits, salaries for people who go chase after landowners, consultations."

For the Pililla wind farm, for example, their equity partner put in 100% of the equity but in terms of the economic sharing, Alternergy got 15% of the economic benefit from the project. "So that's how we started, and we replicated that for the Kirahon project, for the rooftop projects, hydro projects and all the other projects that we do. As one can see 10-15% is not a lot so every now and then we roll over our project cost reimbursement. At some point we wanted to reuse the capital that we have raised to build new projects. That's our way of really scaling up," Gerry explains.

In the latest Philippine Energy Plan, the DOE has set a goal of 50% renewable energy capacity out of the total power production in the country by 2040, from the 29% in 2020. This means there will be more opportunities for Alternergy to expand and help meet those goals.

Alternergy's investment specialist Franchesca "Chestnut" Amatong, who has worked with Vince since 1998, is responsible for making sure that the company gets the best rates for its borrowings and has adequate capacity to pay off its debts. Whenever the company is looking for potential investors, she analyzes the costs and benefits of each option and determines the best deal based on her experience. "The goal is to optimize your finances, meaning to be able to borrow the least amount of money and to be able to use the money that you borrowed for the most number of projects," she says.

Having worked as a trader at a bank for four years, Chestnut already had valuable training in debt capital markets when she joined Next Century Partners more than two decades ago. Through the years, she has assisted Vince in managing the ▶

1 Food packs for Dumagats of Dupinga with Chito dela Cruz

2 Hot meals for Rizal medical workers during COVID-19 pandemic

3 Handwash system for Barangay Pula of Asipulo

4 Rice donation to municipality of Solana, Bataan

Six Metrics of Alternergy's Quadruple Bottom Line Philosophy

100,444

Tons of carbon emission reduced per year, equivalent to 4,566 less jeepneys on the road

74,730

Equivalent households energized each year

358,000

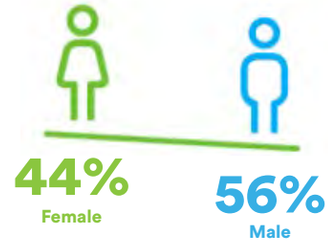
Number of people who pass through Alternergy's visitor center each year and learn more about the benefits of clean power

151,500

Trees planted to date

41

Number of villages hosting Alternergy's project sites



Gender ratio of team members

funds of various environment-related enterprises that he set up with other like-minded investors. In 2013, Chestnut became part of Alternergy when the company needed help in managing debt borrowings for renewable energy projects. It takes years of experience to be able to assess which types of institutions would be ideal financing vehicles for which company, Chestnut says. One of her advantages was that she had a wide network of friends in the banking industry, making it easier for Chestnut to do her job as fund manager.

The efforts of Alternergy's financial team have paid off, with the company growing steadily since its shaky start just before the 2008 global financial crisis. The company measures profitability in terms of economic value, as seen in the annual cash flow generated from the number of megawatts installed or the capital invested in the projects. The latest figures in 2023 show substantial contributions to various stakeholders including consumers, host communities, lenders, investors, government regulators, and employees. ▶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5 Mike teaching grade school pupils at Kirahon Elementary School

6 Team members Charles Flores and Butch Refina planting a tree in Dupinga watershed

In terms of CLIMATE IMPACT, Alternergy has contributed to Philippine targets in minimizing the amount of pollutants spewed in the atmosphere from human activities. So far, the company has avoided an estimated 100,000 tons of carbon emissions every year since the start of its wind and solar projects. A total of 280,561 households get clean electricity from these sources.

In Pililla alone, the wind farm has reduced carbon emissions by 73,000 tons per year since 2015. The solar farm in Kirahon has displaced an equivalent of 9,594 tons of carbon dioxide emissions, while the solar rooftop project at CityMalls is responsible for the remaining amount. The CitySun project with CityMalls is located in 12 shopping centers, with eight completed as of May 2019. The total installed capacity of 5 MW is effective in meeting the electricity needs of the malls, which have their busiest hours in the daytime when the sun is out.

Furthermore, Alternergy has forged a partnership with the World Wide Fund for Nature (WWF) to educate students and local residents about the contribution of renewable energy in solving the climate crisis. They set up visitors' centers where posters and other information materials are available for public awareness efforts. More than 300,000 people flock to the visitors' centers every year to learn about clean energy.

At the Pililla wind farm, a solar-powered television set in front of a classroom-style setup is ready for guests who want to watch a video that explains how a wind turbine works. Alternergy teamed up with WWF and Google Earth to map the entire Pililla Wind Farm, so the public can view it virtually. As part of WWF's "Seize The Wind" initiative, the Pililla project was featured in major publications to highlight the benefits of renewable energy to the Philippines. Billboards along the road also serve as constant reminders to the local community and passing motorists about the benefits of renewable energy.

At the solar farm in Kirahon, busloads of students visit the information center set up by Alternergy and WWF regularly. Solar Pacific staff have visited the Kirahon Elementary School to teach grade school pupils about the benefits of solar energy.

In Gabaldon, Alternergy's subsidiary Dupinga Mini Hydro Corporation (DMHC) is supporting the Central Sierra Madre Mountain Range Critical Habitat for Philippine Eagle and other Wildlife Species through the partnership with DENR in its Environmental Literacy Campaign. Six truckloads of garden soil were donated to the municipality, where local farmers have been planting kakawate or madre de cacao on mountain slopes to aid in forest regeneration. Riprap was also installed to provide permanent and long-term protection for four ancestral burial sites that could be affected during construction.

In the upland areas where the run-of-river hydropower projects are located, tree-planting activities are undertaken to replace the vegetation that are removed during construction.

Records show that 54,293 trees have been planted as of June 2022.

At the community level, Alternergy's projects have been welcomed by local residents whose quality of life has improved, as well as visitors who are learning about clean energy.

Project Manager Margo Mananquil recalls the excitement of village leaders in Barangay Halayhayin in Pililla during his first visit to introduce the wind project, as they anticipated the livelihood opportunities it would bring to the farming community. The municipal mayor and landowners at the site were hesitant in the beginning, he says, but they soon warmed up when they realized the potential of the wind farm to boost the local economy. Most of the turbines were built on hilltops located far from settlements, so there were no complaints about potential noise pollution from the swoosh of the spinning blades, Margo says.

When the project began, there was only a feeder road barely three meters wide that connected sitio Bugarin and Mahabang Sapa to the main barangay road. Alternergy widened the rough road to six meters and upgraded the surface to concrete along the two-kilometer stretch from the first to the ▶

▲ **May 26, 2016: Bamboo handicraft workshop with Pililla host families**

last wind mast, which is almost within national road standards. The provincial government took care of the concreting of the rest of the road that connects Pililla to the R-6 highway in the north to accommodate the growing number of visitors. Outdoor events such as bike races and athletic competitions have been held at the wind farm since then.

With the improvement in the road network, the hilly area has also attracted more business enterprises and real estate investors. From P300 per square meter when the wind farm was first built, land prices in the vicinity have gone up to P2,000 per square meter, says Margo, who has since settled in Tanay with his family.

Alternergy had a smooth relationship with local residents, hiring more than a thousand workers during the construction phase, Margo says. He worked closely with the company's community relations officer in resolving concerns raised by residents, mostly on land-related issues. They also organized livelihood training on bamboo handicraft and the production of souvenir items.

At the visitor center, an employee of the municipal tourism office says souvenir sales are brisk and revenues are remitted to the artisans every week. Miniature wind turbines, stickers, fridge magnets and a wide variety of items are sold at the shop. Alternergy has turned over the management of the center to the municipal government of Pililla, which has started to charge environmental fees and prenup shoot permits to augment revenues. During the Holy Week break, an average of 130,000 people flock to the wind farm. The latest figures for 2022 recorded 300,000 visitor arrivals.

In Dupinga, the company assisted three dozen Dumagat construction workers in getting the necessary documents for their employment. The indigenous community has built riverside picnic shacks for local tourists who want to enjoy the clear waters flowing down the Sierra Madre mountains to Gabaldon, which is part of their ancestral domain. When Typhoon Ulysses ravaged their villages in November 2020, the company donated food and shelter for affected Dumagat families. Ten truckloads of sand were provided for their relocation site in June 2021, while logs from trees that had to be felled during the project construction were donated for their houses, in coordination with DENR. The company also facilitated the formulation of the Dumagat's Community Resource Management and Development Plan and the registration of their organization. In April 2023, the SEC granted juridical status to Eh Elan, Inc. as a non-stock corporation created for the welfare and development of the Dumagat community in Gabaldon.

Alternergy has set aside a portion of the gross income from the hydropower project for the host villages of Malinao and Ligaya and the nearby villages of Tagumpay, Bagong Sikat, Calabasa, and Bagting along with the development of Gabaldon. The company also provided support during emergencies, clearing roads damaged by landslides after a typhoon in October 2020.

In Kiangan, Alternergy provided support for the Rice Terraces IKSP (Indigenous Knowledge, Systems, and Practices) Learning Resource Center and the Community Heritage Library to help the local community preserve their way of life. In February 2022, the company helped organize the Bokiawan Barangay Water System and Farmer's Association to promote better resource management in the upland village. To facilitate the ▶

▼ **February 19, 2015: C.A.R.E. utility vehicle for host municipality of Pililla**

transport of farm produce from Barangay Dalligan, the company provided funds for the rehabilitation of the Pitawan-Dalligan farm to market road. In August 2023, financial support was provided for the installation of 34 units of solar-powered street lights to help maintain public safety in Barangay Munggayang.

In Claveria, Misamis Oriental, Kirahon Solar donated materials for the Alternative Learning School of Gumaod Integrated School. The company also renovated the classrooms of Casinglot Elementary School in Tagoloan to protect them from floods during typhoons. As part of Brigada Eskwela 2021, school supplies were donated to the Kirahon and Dawayan Elementary Schools.

During the COVID-19 health emergency, Alternergy assisted host communities in all its project sites in coping with the hardships brought about by the pandemic.

In the province of Ifugao, handwashing facilities were installed in host communities to protect residents from COVID-19 and other diseases. Oxygen tanks were provided to the Municipality of Lagawe, while the Mungayang barangay health station also received much-needed medical equipment. Face masks and PPE suits were provided to health workers. Color printers and computers were given to Bokiawan Elementary School and Mungayang National High School in Kiangan to help host communities adapt to online learning methods during the lockdown.

December 16, 2016: Hot meals for day center toddlers of Pililla

In the Municipality of Gabaldon, where the Dupinga River hydropower project is located, the town and host Barangays Ligaya and Malinao were provided with public handwashing facilities. Thermal scanners, vitamins, and sanitizers were provided to hospitals and clinics. The company also donated Moderna COVID-19 Vaccines for residents in the municipality. To lessen disruption in education, new community e-learning centers were established where teachers and students can access the internet for online lessons. Paper and ink were given to 25 schools for the printing of Self-Learning Modules.

Access to adequate nutrition became a pressing concern during the pandemic, and Alternergy was quick to provide food assistance to host communities. Sacks of rice were donated to the Dumagat as well as the host barangays and adjacent villages in Gabaldon, as well as households around solar project sites in Misamis Oriental and Bataan that were affected by the prolonged quarantine. Hot meals were provided to social welfare teams and medical staff in the provinces of Nueva Ecija and Rizal. ▶

"Livelihood, education, health, and environment are the main components of our CSR program," says Vince, referring to Alternergy's corporate social responsibility initiatives.

"One of the keys to our success is that we always hire local people as part of our CSR team. We cannot just assign people from Manila. We must have people who speak the language so we can really gain the trust of our host communities. Not only that, in Kiangan we hired from different tribes because they are all distinct from each other."

Since 2019, the SEC has required all publicly listed companies to report their contributions towards environment and social governance or ESG, which is embodied in the sustainability report. Carmen Diaz, chief sustainability officer, compiled Alternergy's first sustainability report as a listed company that was integrated in the annual report presented at the first shareholders' meeting as a publicly listed company in December 2023. She gathered inputs from the three sectors handling wind, solar, and hydro that submitted their reports to a sustainability committee headed by Vince, with Carmen as vice chair. Each renewable energy technology has a designated sustainability champion that will help in cascading policies to the rest of the staff.

The Sustainability Report contains all environmental and social aspects that are affected by the company's operations including the impact on ecosystems, the relationship with local communities, and climate risks. Carmen says, "We have to be mindful of our projects and check physical risks, for example, in case of typhoons or other natural catastrophes. How are you addressing potential problems if the site of your solar farm is prone to floods? Is your technology updated?" The report also included opportunities in providing solutions to the climate crisis, considering the huge contribution of Alternergy's projects to carbon reduction.

▲ **October 24, 2023:** Independent Director Tere Marcial, Maria Pérez, Carmen Diaz and Vince with Environment Secretary Toni Yulo Loyzaga

▲ **October 12, 2023:** Cover of the 162-page *2023 Sustainability Report*, Alternergy's first as a publicly listed company

◀ ***The Alternergy Story*** **was shortlisted in the ESG in Business Short Film Awards**

"We should be consistent because we already disclosed to the public that we're purely renewable, not even hybrid, and no partnership with those who have fossil fuel components. So, no to nuclear, no to coal, no to fossil fuels," Carmen says.

On October 13, 2023, "The Alternergy Story" was shortlisted in the 2023 Global Sustainability Film Awards for ESG in Business Short Film Award. In the same month, Alternergy was awarded "Best Sustainable Corporate Governance – Philippines 2023" by the prestigious *European Magazine*.

As company president, Gerry Magbanua feels the weight of responsibility in achieving goals but Alternergy's family-like corporate culture has made sure that the task does not become a burden. All the team members are provided with adequate training, health and medical benefits, and opportunities for professional growth. The company leadership also recognizes the contribution of each employee, and there are many occasions for celebration.

"We work as a team. We don't work as individuals. So, although I'm president, I know that we have teams that can actually do the work. We just put our heads together and agree on what to do. Everyone has a role to play. And we're confident in the capability of everyone," Gerry says.

With several projects in various stages at the same time, Alternergy has embarked on many ▶

OUR SUSTAINABILITY FRAMEWORK

Quadruple Bottomline Philosophy

At Alternergy, we are giuded by our Quadruple Bottomline Philosophy, which is mainly the company's sustainability framework. This dovetails with the three sustainability pillars: I) ensuring financial Profitability, II) protecting the Planet through contribution to carbon mitigation, and III) taking care of our People through community development and promoting employee satisfaction.

Profitability

Profit - Sustainability is our fundamental business strategy to provide meaningful returns to our stakeholders, both internal and external, by creating economic value, protecting the environment and balancing our social responsibility to the communities we serve.

Climate Change Mitigation

Climate Change Mitigation is measured in terms of annual tons of carbon dioxide emissions displaced or avoided. In June 2022, Alternergy committed to strictly focus on renewable power and not invest in fossil fuel generation such as coal, fuel oil, natural gas, nuclear power.

Host Community Benefits

Provide host community benefits measured in terms of annual households energized each year. Alternergy considers the role of the community as a "social fence" in power projects in emerging countries. Every power asset will proactively engage in the rural electrification of rural villages in its host communities.

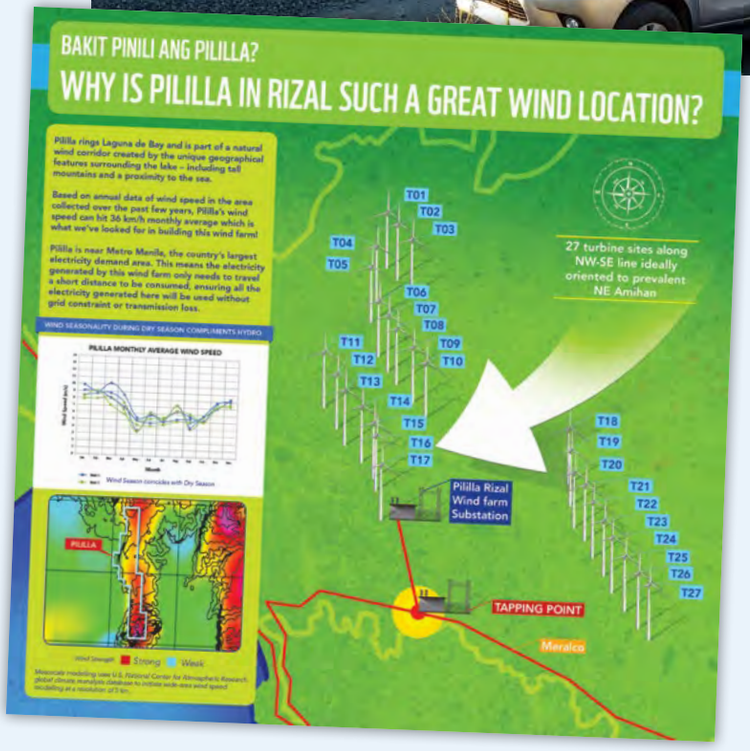
Employee Fulfillment

We aim to provide fulfillment by creating a work environment with a balanced work -life atmosphere that is both challenging and fun.

initiatives that can be overwhelming and stressful for officers and staff. "It's funny because people ask me, how do you cope with all of that? And I say, well, actually I don't feel burdened. Sometimes it may be overwhelming, but it really boils down to understanding what we need to do, and just breaking down issues into small pieces that we can manage and just work with the team. So for us, it's exciting," says Gerry.

One indication that Alternergy has achieved its fourth pillar of employee satisfaction is the low attrition rate, with many employees staying on for more than 10 years. Each of them has a story to tell, which we will hear in the next chapter. ■

Pililla Rizal Wind Farm and Visitor Center



Above, one of the several info panels designed by WWF

The Pililla Rizal Wind Farm and Visitor Center overlooking Laguna Lake has become a local tourist attraction and has been embraced by the local community. With info panels designed by WWF, it is a living classroom of how renewable energy can benefit a community. The average daily number of guests during weekdays ranges from 500 to 800, and during weekends, from 800 to over 1,500. During the Easter Week holiday, the number of guests reached up to 10,000 people. The Visitor Center has become a destination of cyclists and motorbike enthusiasts. Local residents sell souvenir handicrafts and refreshments. The Visitor Center is a vivid example of Alternergy's Quadruple Bottom Line philosophy. ■

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7 Visitor Center had walk-in info panels on renewable energy

8 The photo wall is ideal for Instagram

9 Visitors love to take shots below the turbines

10 Google Earth mapping of wind farm

11 Film crews often shoot scenes around the visitor center

12 Souvenir T-shirts, caps and miniature windmills are sold by local residents

13 Renewable is Doable stand-up by WWF

14 Families like to take photos at the signage installed by the town

Chapter 6

Life at Alternergy

> “Alternergy places a strong emphasis on both competence and values, maintaining a positive and collaborative work environment as it continues to grow and build projects.”

It's the end of another busy week at Alternergy, and the office in Makati is buzzing with chatter and laughter as employees exchange plans for the weekend. The central hub is crowded with youthful newcomers and senior managers mingling in an exuberant atmosphere filled with the intergenerational camaraderie that has become a trademark of Alternergy.

So what's it like working in a corporate setting that puts a premium on work-life balance while coping with the monumental headaches of technologically challenging energy projects? In their own words, Alternergy staff share their experiences.

Michael Lichtenfeld

CO-FOUNDER FOR SOLAR PACIFIC

After working in conservation finance and investment banking, Mike decided to focus on solar energy in the Philippines and the Pacific islands, where he could indulge in his passion for scuba diving at the same time. Mike holds two graduate degrees, an MBA and a Master in Environmental Management, from Yale University that he puts to good use in his executive work at Solar Pacific. He goes back to the US to see his family every year although after almost 11 years, he says the Philippines is beginning to feel like home for him.

We're very much a flat organization. We really like to take input from our staff and I think we are flexible, able to move quickly, able to make innovative decisions quickly, which was not always the case in my previous companies. Larger companies tend to be more bureaucratic.

As an organization, we also have a very strong environmental ethic that we keep in mind. We care about the communities that we work in.

We also try to maintain work-life balance and we encourage this in everyone we work with here. Don't burn yourself out. Try to include our families in a lot of events. Do off-sites. Go visit the projects we're working on, trying to keep that greater perspective in mind, even though, to be honest, we also work really, really hard. The balance goes up and down.

We are growing the team and adding more resources. We're so busy that we need more people. Sometimes it can be a bit overwhelming, because there are so many moving pieces to our work — land rights, permits, interconnection, design engineering, finance, legal documentation, political aspects, local communities, managing contractors, managing equipment supply.

Even though there's a lot of work, and it can be a bit stressful at times, one thing that's nice about this job is that one day or even one part of the day you're thinking about very technical issues — design engineering and technology — and then the next part of the day you're focused on financing, thinking about lenders and shareholders. And then the next day you're thinking about politics and local community considerations. It's diverse. It's never boring. We're always doing a lot of different things so that keeps it interesting.

Although I'm the only American in the organization, the whole team has always embraced me, and I've really never felt like an outsider, which I'm so grateful for. I've been trying to learn Tagalog, I can speak a bit, and some of my staff will push me by firing off Tagalog at me and I'll have to try to understand what I can. Everyone has been really supportive. ▶

October 11, 2023: Dress-up Day with Arman Ang, Rex Morgia, Ruffa Linchoco, Reyfel Maglines, and Mac Soriano

Martha Garay

HUMAN RESOURCES MANAGER

When Martha joined Alternergy in January 2010, there were only 10 of them. In the past 13 years, the company has grown significantly and now has 55 employees distributed in a network of subsidiaries and partners. As the human resource manager, Martha focuses on recruiting individuals with both competence and shared values.

Sir Vince's vision for the organization is to maintain a lean headcount unlike that of a larger organization where people will get lost or lose clarity about their roles. Alternergy is small in terms of employees but impressive with numerous projects. Sir Vince makes sure that he knows the names of everyone in the company. It is very important to him and often interviews those in supervisory positions to make sure that their goals and their values are aligned with ours. During job interviews, it's important that we ask the right questions to establish culture fit. The supervisors and other team members inquire about skill sets, while I check their culture fit based on the values of Alternergy. We emphasize values on teamwork, cooperation, and integrity — values that are very important to us.

For the annual team building, we usually go out of town with a sustainability theme. We would visit one project site and then afterwards, we would go to a nearby place for some relaxing activities. When we went to Cagayan de Oro to witness the inauguration of the Kirahon solar farm, afterwards, we visited a nature park and went white water rafting. In Boracay, after visiting the Nabas wind farm, we went island hopping and then had dinners and lunches together. We would have free time for everyone to relax and buy pasalubong or just spend time together singing and drinking, being merry and having fun with each other's company.

In August 2023, around the company anniversary, the team-building activities were different because we didn't visit a project site. Instead, we invited a facilitator to host the team building activities and to guide us in our structured discussions on sustainability, office improvements and office culture. The facilitator introduced games focusing on the values of Alternergy like teamwork, cooperation, determination, and respect. The team members were grouped and were given questions that they answered collectively. Sample questions were — How do we improve sustainability in the office? How would you make the office family-friendly? We have another office space here in the building — what would you like to be incorporated in that office? Management wanted to get suggestions and feedback from everyone.

Alternergy boasts a dedicated workforce, with many employees having been with the company for five to six years. Young recruits may leave to seek opportunities elsewhere, but those with more experience tend to stay because they already know what they want, they like what they're doing and they appreciate the office culture and most importantly, they see potential for personal growth and company growth.The company's leaders encourage open communication, allowing employees to voice their opinions and suggestions. Conflicts are addressed maturely and if someone cannot handle a task, they can express their concerns to senior management, leading to a resolution.

I'm currently working on salary and benefits alignment with the market, conducting a salary review through job evaluation and updating our employee manual to clarify responsibilities. Overall, Alternergy places a strong emphasis on both competence and values, maintaining a positive and collaborative work environment as it continues to grow and build projects. ▶

▶ **July 5, 2018:** Silay Solar Farm team visit

▶ **August 13, 2010:** Shooting the rapids, Pagsanjan River

▼ **March 13, 2016:** White water rafting, Cagayan River

Ruffa Mae Linchoco

HYDRO PROJECT COORDINATOR

As the hydro project coordinator, Ruffa Mae handles office and site-based activities and expenses, as well as permitting and regulatory requirements for the projects that are under construction. She graduated with a management degree from Bicol University in 2019 and joined Alternergy in March 2022. She juggles her job with student life in law school at the Polytechnic University of the Philippines, attending three hours of classes in the evening plus afternoon classes on Saturday. This means she only gets an average of 3 to 4 hours of sleep on most days, so she can make it to her 7 am to 4 pm office schedule. She credits Angkas motorcycle drivers for shortening her commute to thirty minutes instead of one and a half hours on weekdays, and Alternergy's flexitime policy for allowing her to pursue her youthful dreams.

One of the things I like about the management is that they really value the time of the employees with their family. If the government declares there will be no classes or if there are discretionary holidays, we get the same holidays or we can work from home. It's like they're saying, since your kids or your spouse is at home, you should be able to spend time with them.

It's very flexible here especially with time management. You can work during the time that's best for you, as long as you're available during the bracket that you're needed for the meetings, usually between 10 a.m. to 3 p.m. As long as you deliver the outputs, it's fine.

The company doesn't micromanage. They give you the list of deliverables, long-term and shortterm targets, and then you can think out of the box on how to achieve them. They won't spoonfeed you, and I think it's great especially for those who are new like me because it really makes you think and grow. You learn from everyone and if you don't know something, you can always ask the other employees and then you can strategize on your own. I think this also helps me in law school because my boss doesn't give me a list of specific things to do every day. Instead, she will tell me, this is our target or this is the most immediate task and then I'll work it out. It's very output-based and shows how they value the knowledge and skills of the employees. The management trusts us.

▲ **Thanksgiving Lunch**

I also admire the way the management sits with us during training and seminars. During our first workshop, I was surprised and I was asking, really? Sir Vince is joining? Sir Gerry is joining? They participate in the activities like a normal employee. ▶

▼ **August 2008: Alternergy's 10th anniversary**

Kim Pagdilao

CORPORATE LEGAL COUNSEL

As the corporate legal counsel, Kim takes care of contracts and local stakeholder engagement. She worked for five years in the power industry before joining Alternergy in 2017. With the recent listing of Alternergy in the PSE, one of her main tasks now is filing disclosures for the company.

The first person I talked to when I applied here was actually Sir Vince. I really liked Sir Vince's outlook at that time on renewable energy. The interview was very informal and it was fun. He was asking me what book I had in my bag at that time. I think that's the way he tries to find out the kind of person you are. So what's in your bag? What book are you reading right now?

The most challenging task for me is land rights acquisition for one of our hydro projects because we need to talk to a lot of local stakeholders. We have to make them understand what our capabilities are and that we want to be able to help them, but they have to give us a chance.

Now that I'm the one who files the disclosures for the PSE, I can say that it's also one of my challenging assignments. It's now taking up 50 percent of my time. I've asked my boss to give me up to one year to study it, so that if we have to delegate the task to someone else, I will know how to guide them or how to help them. I'm happy to gain more knowledge since this is the first time that I'm doing this, so that I can add value and I know how to do it.

If there's a downside to working in a small company, sometimes we feel like we're stretched thin. We're trying to help this project, trying to help that department. But the advantage is that when there's a problem, it's easy to approach people. I can discuss any problem or share the burden with my boss, so that two brains thinking are better than one. We can probably try to solve this if there are more of us thinking about how to solve it. ▶

1 Around Valentine's Day, the office marks "Happy Hearts, Healthy Hearts" with blood pressure check-ups in the office

2 December 15, 2017: Treating orphans to amusement park

3 January 25, 2024: Mental Wellness #RenewWell Seminar in the office


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Rowena Olano

CORPORATE SERVICES AND OFFICE MANAGER

Before she joined Alternergy, Wheng worked as a senior secretary for 13 years in a pharmaceutical company with almost 400 employees, so it was a big adjustment for her. There were only less than 10 of them when she joined Alternergy in 2008, and she had to take a pay cut because they were still starting the business. She became a regular employee after three months and has no regrets about her career decision, as the company has become her second home. As the corporate services and office manager, she is responsible for ensuring the overall efficiency of the corporate and administrative services of the entire Alternergy group. Her calendar is now full of planning needs for the company.

I assist with whatever the day brings! Helping out all the departments, even just making sure everyone is set for the day. I think it is important to be someone that can be relied upon not only to take care of day-to-day tasks, but someone who is trusted to assist across the board, while creating a happy work environment. I love being able to contribute to every team within Alternergy. The most rewarding part of my job is completing tasks that I know will make someone else's day just a little bit easier. Being someone who is willing to help whether your request falls under my job description or not is the type of employee I am proud to be and strive to always be.

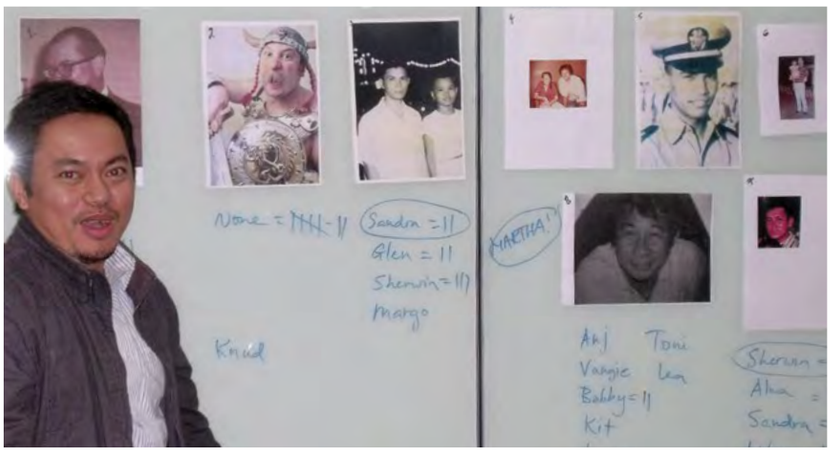
What I really like here is that it's easy to approach the bosses. The managers know what's happening and I can say that I have a family here. Every Monday, we have free lunch and we exchange personal stories, like what's the best movie you watched recently. After the signing of our first joint venture in 2009, we all went to El Nido which was my first time. It was fun!

All the staff are welcome to visit our community projects so that we become familiar with our work. We get invited to join tree-planting and other field activities. We had an open house in the office so our children would know what their parents are doing — we set up the wind, solar and hydro models in each cubicle for them to play and learn.

We celebrate everything. We celebrate the birthdays of employees with cake and ice cream. We have Father's Day and Mother's Day celebrations, also Women's Day. Every February 14th, all the ladies receive flowers from Sir Vince. We have a Halloween party for the kids. I'm now preparing for the party in December where we will give Christmas baskets to all the staff. ▶

June 7, 2017: Open House for children of team members to learn about wind, solar, and hydro energy

▼ Celebrating Father's Day



Sandra Nepomuceno

EXECUTIVE SECRETARY

While working at the Office of the President of National Power Corporation, Sandra served as the liaison with the Department of Energy when Vince headed the agency in the early 2000s. She held executive positions at the National Power Corporation and the National Transmission Corporation before Vince recruited her to join Merritt Partners in 2007, when the advisory firm was assisting investors that were interested in acquiring NAPOCOR's properties from the government's Power Sector Assets and Liabilities Management Corporation. Later, she joined Alternergy and has been with the company ever since, sharing her knowledge about the energy industry with colleagues. As the executive secretary of the company, Sandra serves as the bridge between the leadership team and the staff in coordinating various tasks, which means she often keeps irregular hours. She doesn't mind her busy schedule though, being a very early riser who is the first in the office at 4:30 in the morning to avoid Manila's rush-hour traffic.

Because of the nature of our business and Secretary Vince's hectic schedule, I need to be on call, sometimes even during weekends. I do not mind the irregular hours since management allows flexibility of working from home, especially when the weather is bad. I am also a morning person, already at the office by 4:30 AM. I can accomplish more when it is quiet and there are less people in the office.

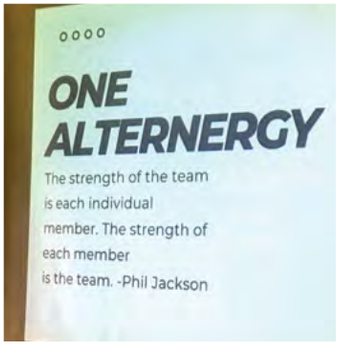
I report directly to Sec. Vince. He has such a high energy level and I need to keep up with it. Whatever he does, I have to follow very closely, otherwise I will lose track of what he is doing, all his activities, all his affiliations, all his Board memberships. What I do is, I anticipate what he might need. For example, if he is going to a meeting, I prepare briefing notes for him about the person or company that he is meeting for the first time.

He likes to write us letters, usually in December. It usually comes with something, little gifts. I believe it is very sincere because it is specific to you, to what you do. He tells you this is how much you are valued here, how you helped him, what he appreciates about you. I keep all of them to remind me about the gratitude from him, how he is profuse in saying, 'thank you so much!'

While I report directly to Sec. Vince, I try to help the other officers and staff. We help each other so the teamwork is very strong. Our designations do not define us. We treat each other as equals and respect each other's capabilities. That is the culture here.

Stress levels can be high sometimes but we have learned to laugh about it. I have never seen anyone here who has thrown a tantrum. I saw that when I started working years ago, when I was very young. But not here. ▶

August 16, 2023: Team Building, Preziosa Farms



Reyfel Maglines

GEODETIC ENGINEER

As a licensed geodetic engineer, Reyfel gained experience in mapping the country's natural resources when he worked with a special project of the Department of Science and Technology. He pioneered the use of LIDAR technology in conducting land surveys and producing resource maps in all kinds of terrain, from agricultural to coastal areas. Reyfel is now using these skills in mapping out the sites for renewable energy projects.

look at right of way concerns, and it's a major challenge for a project. It could kill a project if not handled properly. For example, if your project is hydropower, you will only use the river but the access to the river or the construction of the bridges on the ground would stretch to 1 km, up to 10 km. It's like you're making a road.

In one of our hydro sites for example, the DENR says the entire Ifugao is forest land and the NCIP says it is an ancestral domain so there are two permits needed. Unfortunately, there are also actual cultivators on the site so we have to conduct our own cadastral survey. The land is not mapped because it is communally owned and when we did the survey, there were almost 300 lots which we did not expect. We have to negotiate with each lot owner for the right of way to the project site, while the trucks and contractors are already there.

We conducted the parcellary survey in three hydro projects to determine the boundaries of lots. This was useful especially during the pre-development stage in Ifugao, when we were still deciding if it's go or no go. For the 300 lots, we were able to compute for a certain lease rate, then that was one factor that made us decide to proceed with the project. When we measure the boundaries, as much as possible, all adjacent owners must be there because you need to confirm their presence. The claimants appreciated it when they saw the results of the survey with an overlay of the satellite image. They saw what their lots looked like and they were impressed because there's a complete lot plan and we numbered their lots, so now, they can say, for example, lot xx is in my name. They have a record now, which was hard to do in the past, knowing how much the cost of the survey is. The council of elders in the village certified that the survey is correct.

We know that at the first stage of construction, it could be a bit destructive so people would say, that's too much. So we would talk to them and tell them that after the construction period, whatever damage is done, we will return it to its original state as much as we can.

The challenges for solar are more about the site. The process can be long for the land conversion from agri into industrial use. It might take several years. So the 'go or no go' decision for solar is regarding land conversion. That's the major factor because we know the sun will always be there all the time. The solar farm can be built in 6 to 8 months. It's faster than the other renewables. But if you have to conduct land conversion, we don't know how long the process will take and if it is too long, is the project worth it?

For wind, most projects are on forest land or timberland because the projects are located in the mountains. Like for our project in Quezon Province, it is located on timberland but there are claimants too. We have to consider these in our financial model. We always treat project sites as privately owned or that there's a claimant that will come out anytime. One positive aspect of our wind sites is that we have to climb up the mountains so it's also an adventure.

We have regular staff meetings on Mondays, and the engineers have our own technical meeting every Friday. That's good because the project monitoring is very regular and if I have an issue, I can go straight to the bosses and say, sir, what should we do?

My work is challenging but also fun because we're always outdoors, under the sun. The fieldwork is with the community. I need to engage with government agencies, local governments, mayors, barangay. Patience is the key in working with host communities. What's good is that I'm inspired because of our leaders in the company. They advocate for the environment, for sustainability. They are also family-oriented so we apply this company culture in the field. We promote the environment, health, safety, and good manners because we're bringing Alternergy to the site. ▶

Celebrating Philippine Independence Day

Our Values

Love for the Environment

We are committed to doing business that is good for the planet. We are bound by our common love for the environment and our compassion for our host communities.

We use the best technology to make sure our work helps preserve the only planet we know. Before we start any project, we get advice from experts on nature to make sure what we build will not harm the environment.

We celebrate the amount of carbon dioxide emissions displaced by our projects. We help teach the public about climate change.

We want to be a good partner to the communities where we work. We consult with the local people to understand how we can bring a positive impact on their environment, livelihood, health and education. We address any concerns because we believe our host communities should be part of our success. We deeply care about the Earth and aim to create a sustainable future for the next generation.

Act with Integrity

We believe that nothing is more important than our reputation and behaving with integrity is a big part of who we are. As a group, **integrity is our most valuable asset** and is the foundation for everything we do. People admire us because we are honest and fair with our partners, stakeholders, shareholders and fellow colleagues. We believe in being clear and honest in our business practices, which leads to more business in the future. **We say what we mean, match our behaviors to our words, and take responsibility for our actions.** We deliver on our promises. We do the right thing even when no one is watching.

Be Accountable for Decisions, Actions and Results

We are fully accountable for what we do or do not do. We take personal responsibility by knowing our duties and committing to do our part. **We value hard work, dedication, loyalty, and commitment.** We finish all the tasks expected of us. **We are dependable, reliable, and we go above and beyond to make things happen**. We value teamwork and we work well with our colleagues. Our work quality is good and consistent. **We are proud of our work as a reflection of our pursuit of excellence**.

Determination

Developing our renewable energy projects involves a lot of tough work, from originating, designing, permitting, financing to constructing. **We are determined to deliver these projects better, faster, and within budget**. Even when things get tough, we don't back down. We have seen that persistence leads to positive things happening. We are not afraid of challenging projects — in fact, **we thrive on taking on hard projects**. We constantly push ourselves to do our best, **we look for solutions to every challenge, and we don't give up**. Every day we come to work excited to make an impact through our determination and passion.

Respect Underpins Everything We Do

In our workplace, we treat each other with respect. We listen to opinions and new ideas, even if they are different from our own. Our leaders encourage healthy discussions. It does not matter if someone is new or young or junior, everyone can speak up and be heard. We can freely share with our leaders any concerns bothering us. Because we respect everyone, we don't like people who are not team players, or hide their true intentions or behave insincerely.

We respect our business partners, lenders, and investors. We know they can choose any company but they chose us because they trust us to deliver the best outcome for their involvement. We work hard to keep that trust by doing what we promised. Among our suppliers, we talk openly and share as much information that is available so we can all work on terms that are fair to all sides.

We create a culture of respect by nurturing our team members. We provide them with health and medical benefits, training, and opportunities for recognition.

We respect our families too. They can come and see what we do, what we build, and what we believe in. We even have special days for families. We understand when our colleagues have urgent or important family things to take care of.

Enthusiasm for Learning

In everything **we do, we try to learn and use the latest and best technology** to advance our projects. As pioneers, we are not afraid in developing new forms of renewable projects. We are a group of skilled, enthusiastic, and curious people who are always **willing to learn**, who want to excel at what we do, both on our own and as a team.

Teamwork

We are part of a bigger team and each one has a role. Teamwork fosters cooperation to share the right information to help us work well together and meet deadlines. When work is divided up among team members, it gets done faster and our overall business operates more efficiently. Those of us who are good at getting things done quickly can help others. If one person struggles, someone else can help. **Being a good team player means focusing on what is best for the company's success**, not just on our own personal tasks to do. ■

Chapter 7

Clean Energy for the Future

"Together, we have pioneered, powered, and inspired change. The path ahead holds exciting possibilities. Alternergy is ready to embrace the challenges and opportunities that come our way."

On the morning of March 24, 2023, two young girls joined their fathers to witness the virtual bell listing of Alternergy as the first initial public offering (IPO) for the year at the Philippine Stock Exchange, signifying the promise of clean energy for future generations.

"Our mantra has always been, we are going to leave a sustainable future for the next generation, so my daughter Siena and Gerry's daughter Karla and their moms were present at the listing ceremony," says Vince.

While the public listing had been in their game plan from the start, the founders of Alternergy felt early 2023 would be the best time to do it, as the company would soon enter its 15th year as a renewable energy company.

"It's a milestone year, and looking back on our early years, we have been what we call pulling ourselves by our bootstraps," says Vince. For most of its existence, Alternergy had relied on shareholder advances to provide bridge funding whenever they had new projects. The funds were repaid after they obtained financing from banks and partner investors, but this could not go on any longer, especially with a multitude of new projects that need a substantial amount of capital. "We felt that after 15 years, it's time to raise fresh money and offer new shares," says Vince.

▲ **March 24, 2023: Alternergy team at their IPO Listing**

▶ **Gerry and Karen Magbanua with daughter Karla, together with Vince and Maria Pérez with daughter Siena and Vince's brothers Raoul and Miguel**

As the executive team of Alternergy grew over the decade and a half from the original three co-founders, it became necessary for them to sign up to a common shareholders agreement. Discussions sputtered on and off for several years, until finally, on January 22, 2021, the six major investors signed a Shareholders Agreement, and recognized that a public offering was in the best interest of the company.

The impetus came in December 2021, when they learned that a solar power company got listed on the PSE. The co-founders felt that Alternergy had a credible solid track record in renewable energy and was now in an ideal position to go public. As former investment bankers, Vince and Eduardo knew the company could tap the capital markets for preferred shares and green bonds as a publicly listed company.

Their resolve was bolstered two months later when the war in Ukraine resulted in an energy crunch and countries all over the world began looking for alternatives to fossil fuels. "Oil and coal prices rose, which made renewable energy a very compelling investment for the public," Vince says.

But first, the founders needed to get a third party to evaluate how much Alternergy was worth before they embarked on an IPO. They reached out to FTI Consulting, a leading valuation company in the Philippines led by Butch Gregorio and John Balce. "Their assessment was that based on our project pipeline, the company before an IPO would be worth somewhere between 3.6 billion to as high as 5.2 billion pesos," Gerry says. The valuation was based on the substantial revenues from the Kirahon solar farm and the potential income from wind farms, especially Tanay and Alabat once these projects become operational in the next five years.

"It became very obvious that we really should be focusing on developing our wind projects, because that portfolio, according to FTI, accounts for a large value of the company," Vince says. To make sure that the projects in the pipeline come on stream as scheduled, the founders set a target of up to two billion pesos that they would need to raise in the public offering.

"An IPO is a turning point in the life of a company. It's a process, not an event. Successful companies start early with an assessment of their readiness to go public," says Vince.


INVESTING FOR THE NEXT GENERATION

Renewable energy pioneer Alternergy (ALTER) debuts on the PSE's Main Board as the 1st IPO of 2023 backed by a diverse investor group with a shared vision of investing for the next generation. Alternergy Chairman Vince Pérez (center) and President Gerry Magbanua (right) led the ringing of the bell on March 24 with its board directors and their daughters.

Banner ad on front page of *Philippine Daily Inquirer*, March 27, 2023, the Monday after Alternergy's IPO Listing

Two days before Christmas in 2021, while the pandemic was still raging all over the world and he was in seclusion in Melbourne in Australia with his wife and young daughter, Vince reached out to Val Bagatsing, president of ICCP or Investment and Capital Corporation of the Philippines. Val used to work with IFC, the International Finance Corporation of the World Bank, and would be in the best position to offer advice to a company that promotes sustainability. Earlier, ICCP had introduced an equity partner to Alternergy for one of its hydro projects.

Vince also contacted Wilson Tan, chairman of their auditor SGV Ernst & Young, to request for assistance from their capital markets advisory team in the IPO process. That same day, Wilson sent a presentation deck that outlined the steps Alternergy would need to take in its IPO journey. The list was daunting. To qualify for the main board of the PSE, the company needed to have at least 50 million pesos in net income in the previous year and a cumulative 75 million pesos in the last three years. It should be worth at least 500 million pesos before the IPO and offer no less than 20 percent of its shares to the public and must have at least 1,000 stockholders. Alternergy would also need to appoint two independent directors, something they have never done in the past as a privately-held company. The easiest to fulfill was the requirement that the company should have been operating for at least three years, as the company had already been active for 15 years.

On January 6, 2022, Vince convened a special meeting of Alternergy's senior management executive committee: CEO Gerry Magbanua, Knud Hedeager as co-founder and head of the wind portfolio, Eduardo Martinez-Miranda who was in charge of hydro, and Mike Lichtenfeld for solar. General Counsel Janina "Ina" Arriola, who joined a year earlier when Toni de Guzman stepped down, was also in attendance, as the IPO process had many legal requirements. They discussed the pros and cons of going public.

The main benefit was the ability to raise long-term capital on a permanent basis, improving their debt-to-equity ratio instead of relying largely on shareholder loans as they had been doing in the past. They would be able to raise additional capital in the future through perpetual preferred shares or green bonds. The listing would establish a market value for the shares of senior management officers who had been shoring up the company, creating future liquidity for them. Getting listed in the PSE ▶

▲ Execom members decided in a closed-door meeting at Manila House to proceed with its IPO

would also make Alternergy more visible and help improve their corporate governance.

The main disadvantage, of course, was that the founders would be diluting their holdings and would no longer own 100% of the company. There would be constant pressure to meet or exceed earnings. Regulators would also require Alternergy to be diligent in timely disclosure of company information.

"Are we ready? Do we agree on why we need to go public? Are we all on board?" asked Vince of his partners. The partners had a high-level discussion and "everyone said, yes, let's go for it," says Vince.

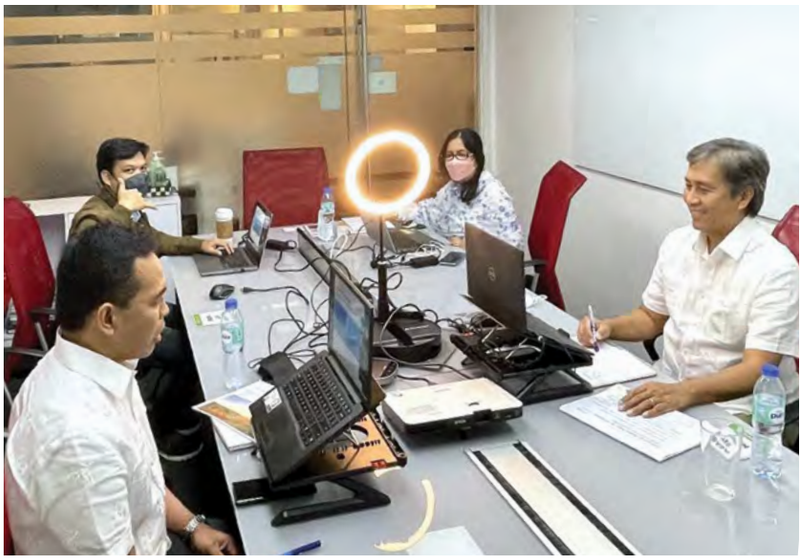
One week later, on January 12, the executive team met with Val Bagatsing and ICCP Executive Director Manny Ocampo to discuss the IPO requirements. The team asked how long the process would take, and ICCP said six months would be doable if everything was ready, which prompted the company to set a fighting target of June 2022. "In hindsight, it was completely unrealistic," Vince says. Their auditing partner SGV had cautioned them that most likely, it would take the company 18 months to get listed in the PSE.

At the outset, ICCP observed that Alternergy had a fragmented structure with minority interests in many of their subsidiaries. They expressed concern that the company would look like a portfolio company rather than a company that owned the majority of its assets.

However, there were also several key success factors for Alternergy that would make a big difference in the IPO journey. The track record of its co-founders with the Bangui Bay wind farm and pioneering efforts in three renewable energy sectors that covered wind, solar, and run-of-river hydropower represented the "X" factor for the company, according to Val Bagatsing. He also noted that Vince had become known as the country's renewable energy czar, with a strong reputation as an environmentalist and as the former Energy Secretary.

According to ICCP, Alternergy had to prepare a game plan over the next five years on how it would generate revenues and cash flow from its new projects, and how it would develop opportunities for growth. ▶

▼ Vince, Gerry, Jay Garcia, and Vangie Moises conducted the IPO roadshow entirely through Zoom presentations



Forbes

Alternergy gears up for Philippine IPO to bankroll renewable energy projects

By Jonathan Burgos
February 10, 2023

ALTERNERGY — which built Southeast Asia's first commercial wind farm in the northern Philippines — is gearing up for its initial public offering next month to bankroll renewable energy projects with a combined capacity of over 1.2 gigawatts.

Bilyonaryo

Alternergy taps Domingo and Marcial as independent directors

February 21, 2023

FORMER ENERGY SECRETARY Vince Pérez's Alternergy Holdings Corp. is reinforcing its management team in preparation for its public listing next month.

philstar GLOBAL

Alternergy welcomes former SEC Commissioner Eph Amatong as Adviser to the Board

March 28, 2023

MANILA, PHILIPPINES — Renewable energy pioneer Alternergy Holdings Corporation (Alternergy) announced the appointment of Atty. Ephyro Luis Amatong as an adviser to the board of Alternergy. He is former Commissioner of the Securities and Exchange Commission.

BusinessWorld

Españo joins Alternergy as board advisor

By Ashley Erika O. Jose
July 4, 2023

ALTERNERGY Holdings Corp. on Monday said the former chairperson of Punongbayan & Araullo Grant Thornton has joined the renewable energy company as an advisor to the board.

Afterwards, Gerry and Vince took the lead in setting up a resource and internal IPO team, knowing that the process would be time-consuming and require dedicated senior management time. They called the endeavor Project Gaia, in honor of the Greek Goddess of the Earth, and scheduled weekly updates. The team included General Counsel Ina Arriola; Chestnut Pascual Amatong, who was designated as the interim investor relations officer; finance analyst Jay Garcia; and Vangie Moises, communications officer. From their auditing partner SGV, they alerted their relationship partner Leovina Mae Chu to be part of the team. Other SGV officers, specializing in tax and capital markets, came in later. Vince requested his former staff at the DOE and Board of Investments, Gladys Policarpio, to write a draft offering memo by February 7th 2022, which she completed promptly.

Alternergy recruited two independent directors to join the board — Theresa Marcial, head of BPI Asset Management, a trustee of WWF Philippines and one of the leading women bankers in the country, and former Trade secretary Greg Domingo, himself an experienced international banker.

To qualify for the main board listing at PSE, Alternergy had to raise at least 500 million pesos of value of equity, and to do this, some of the advances of the shareholders were converted into equity, dormant subsidiaries were spun off to simplify the group structure, and new shares were authorized. The company's bylaws were amended and reorganization was done to meet financial requirements. Alternergy also acquired majority control of the Kirahon solar farm to comply with the three-year track record of profitability, another major criteria for the main board.

Having consulted with ICCP from the start, Alternergy tapped it as Sole Issue Coordinator and as one of two Joint Issue Managers for the IPO, along with BDO Capital. Vince was familiar with the capital market capability of BDO Capital, led by fellow Wharton alum Ed Francisco and Gabby Lim. BDO Capital was his partner in acquiring a stake in NorthWind way back in 2006, and inviting BDO as Joint Issue Manager was a natural choice. He also reached out to a former cabinet colleague, Avelino "Nonong" Cruz Jr., chairman of UniCapital, to join as Co-Lead Underwriter. The three underwriters performed due diligence on Alternergy and met with FTI Consulting to find out how the valuation of ▶

1 March 24, 2023: Senior Officers of Alternergy's IPO Underwriters (left to right): Jimmie Martirez and Pam Victoriano of UniCapital Securities, Ed Francisco of BDO Capital, Guilly Luchangco and Manny Ocampo of ICCP, Bambi Billano and Gabby Lim of BDO Capital

2 March 24, 2023: Vince with his friend, Wilson Sy, PSE director and Ramon Monzon, PSE President, holding up the "Triple Play" sign

3 March 13, 2023: Photo wall for Launch of Formal Public Offering

PSE | The Philippine Stock Exchange, Inc.

Alternergy Holdings kicks off 2023 IPO listings at the PSE

March 24, 2023

ALTERNERGY Holdings Corporation (stock symbol: ALTER) listed its shares at the Philippine Stock Exchange (PSE) on Friday, March 24, 2023, making it the first company to debut on the stock market this year.

The Manila Times

Alternergy makes PSE debut after P1.61-B IPO

By Ed Paolo Salting
March 25, 2023

RENEWABLE energy firm Alternergy debuted in the main board of the Philippine Stock Exchange (PSE) on Friday after having raised a total of P1.61 billion from an initial public offering (IPO).

Alternergy was done. They also interviewed SGV, Alternergy's external auditor.

The partners set aside several million shares with BDO Trust for a future employee stock option plan for the staff of Alternergy. A team from MVGS Law led by Manuel "Tonito" Gonzalez and Gwyneth Ong was engaged as Alternergy's transaction counsel, while Romulo Law partner Mirella Alegre-Batungbacal was selected as Underwriters' counsel. Melissa Rosario-Lichaytoo of Roxas delos Reyes Laurel & Rosario Law signed up as corporate secretary of the listed entity, together with Sherleen Macatangay as assistant corporate secretary. The escrow agent was RCBC Trust, while BDO Securities was appointed as stabilization agent that would keep the stock price steady for the first 30 days.

Triple play became the main message of the company in promoting the IPO, to distinguish it from the other listed renewable energy companies on the PSE that only had solar projects. Alternergy had wind and hydro in addition to solar, and its Triple Play ▸

Portfolio became the catchphrase for the company in the lead-up to the PSE listing.

In July 2022, Vince reached out to Leana Carmona, a public relations expert he had met when he was at the DOE, to help Alternergy develop its IPO story. Leana had set up her own company called Rebel Marketing and her team came up with the Triple Play messaging that helped Alternergy attract investors successfully to its IPO.

In addition to the three-way portfolio messaging, the PR firm promoted Alternergy's unique positioning among its competitors as a purely renewable energy company, unlike others that had interests in coal and diesel and other fossil fuels. Alternergy had a robust pipeline, with 26 service contracts and 10 operational projects and the others coming on stream in the next five years, which was a good indication of growth. These projects complemented each other seasonally so that electricity consumers could count on wind, solar, and hydro on windy or rainy or sunny months. Most of all, these renewable projects contribute to carbon reduction and addressing the climate crisis.

> "Alternergy is uniquely positioned as a purely renewable energy company with a triple portfolio of wind, solar, and hydro projects that complement each other seasonally."

4 Alternergy skinner ad on *Philippine Daily Inquirer*

5 Alternergy ad on Investagram

6 Alternergy public bus ads seen in BGC business district

Secondly, the company's founders had developed a reputation as a pioneer in many ways — the first wind farm in Bangui Bay that was also the first in Southeast Asia, the first solar contract approved by the ERC, the first solar battery in Palau, and many others. This would have huge relevance for potential shareholders because it meant that the company had an edge in navigating the complex permitting process involved in developing energy projects. Alternergy has also proven that it has been able to access capital to build projects, becoming a trusted partner of banks and contractors. The company espoused a quadruple bottom line philosophy as part of its core values, monitoring not only profitability in terms of cash flow but also ensuring that its projects benefit host communities and that its employees are fulfilled in their jobs. It has shown that financial growth is possible while improving people's lives and contributing to the clean energy goals of the Philippines.

Rebel Marketing started arranging media interviews where Vince was introduced as the chairman of Alternergy and the country's renewable energy champion, as he had been more identified as a former Energy Secretary and an environmentalist in the past. From television shows like ANC's *Market Edge* and CNN Philippines to the business magazine *Forbes* and the social media news outlet *Bilyonaryo*, Alternergy was highlighted as one of the pioneers in the renewable energy revolution in the Philippines that had a unique triple play portfolio. Vince and Gerry took turns in raising the company's profile and the Alternergy brand. They reached out to the anonymous author of *Merkado Barkada*, an influential blogger that provides "fun financial news for Filipinos." The company held a roundtable with bloggers, a growing media segment ▶

in the Philippines, and announced an upcoming offshore wind joint venture with Shell in a well-attended press conference in November 2022.

To boost brand awareness, Alternergy took out advertisements in major dailies and their news websites, and posted 10-second video clips on the most popular social media platforms. A huge electronic billboard showing the company's triple portfolio was displayed at the EDSA Ortigas flyover, while billboards promoting various renewable energy projects were placed on the back of buses in BGC.

Alternergy's LED billboard ad, EDSA Shrine

When the preliminary prospectus was finished, it was submitted to the SEC in October 2022, and was given pre-effective approval on November 8. Finally, just before Christmas on December 21, 2022, Alternergy got the notice of approval from the Philippine Stock Exchange but by then, it was too late in the year to do the IPO. The company decided to wait until the new year.

However, Alternergy faced another hurdle with the PSE's rule that a company cannot go public with audited financial statements older than six months. Its fiscal year ends on June 30 instead of the last day of the calendar year, which meant Alternergy's audited financial statements would become "stale" by December 31. They asked SGV to do another full audit ending September 30, 2022 so Alternergy could go public before March 31, 2023.

Immediately after the auditing firm updated the audited statements on January 18, 2023, Alternergy's founders started its formal roadshow on January 23 to attract IPO investors. They had already begun briefing prospective institutional investors much earlier, from September 28 to December 7, thinking the company could go public by December. They held multiple Zoom meetings and one-on-one presentations. "The institutional investors are the anchor investors. You pre-sell to them before you sell to the retail investors," Vince explains. They had to redo everything in January and presented again to 43 qualified institutional buyers including equity growth funds, banks, trust companies, and family offices.

As the CEO, Gerry Magbanua took turns with Vince in presenting the prospectus to potential investors, just like what they did when the company was starting out. However, this time around, it was much easier. "The big difference is that when we were doing the initial fundraising for the company, we had no track record yet. We only had ideas. In 2007 and 2008, Vince and Knud and myself, we were involved in the Bangui Bay project so that was our personal experience in renewable energy. But then, as a start-up, we had no track record yet to show off," Gerry says.

"Fast forward to the IPO roadshow in early 2023, we have already proven that we have done the Pililla project, we have done the Kirahon project, we have done the solar rooftop projects, we have undertaken construction of two run-of-river hydro projects," Gerry says. "We were able to obtain all these permits despite all these challenges. We were able to pull through and come out with a solution at the end of the day, which enabled us to successfully implement those projects. it's just a matter now of scaling up what we've done."

While Vince and Gerry served as the public face of the company during the IPO process, they were ▸

> "We've always been strong advocates for what we call green democratic capitalism, giving every Filipino family the opportunity to own part of a green energy company."

Ina, Vince, Gerry and Mike at the PSE Lobby

◂ **ANC"s *Market Edge* with Mimi Ong and CNN Philippines' *The Last Word* with Rico Hizon featured Alternergy's IPO Listing**

fully supported by the entire Alternergy team. "The internal working team which included Chestnut, Vangie, Kim, Jay, Louie, Martha and Wheng labored very hard and with so much dedication and heart to make the listing happen, through weekly meetings, hours of page-turning the info memo, wrestling with the auditors, the underwriters and PSE," recalls General Counsel Ina Arriola. "Even our admin staff Alaiza and Me-Ann did quite a bit of heavy lifting with the regulatory filings, if only to ensure papers were signed, notarized, and delivered on time to meet critical regulatory deadlines. This is very much part of our employee culture, where no contribution is too small, which is critical to Alternergy's continuing success."

The final order book recorded the total number of 1,265,000,000 new subscribed shares priced at 1.28 pesos per share, which meant Alternergy had raised P1.62 billion from the IPO, representing 32% of its ownership. The company was valued at P5.03 billion at listing, including the P1.62 billion that was raised, close to the valuation by FTI Consulting, says Gerry.

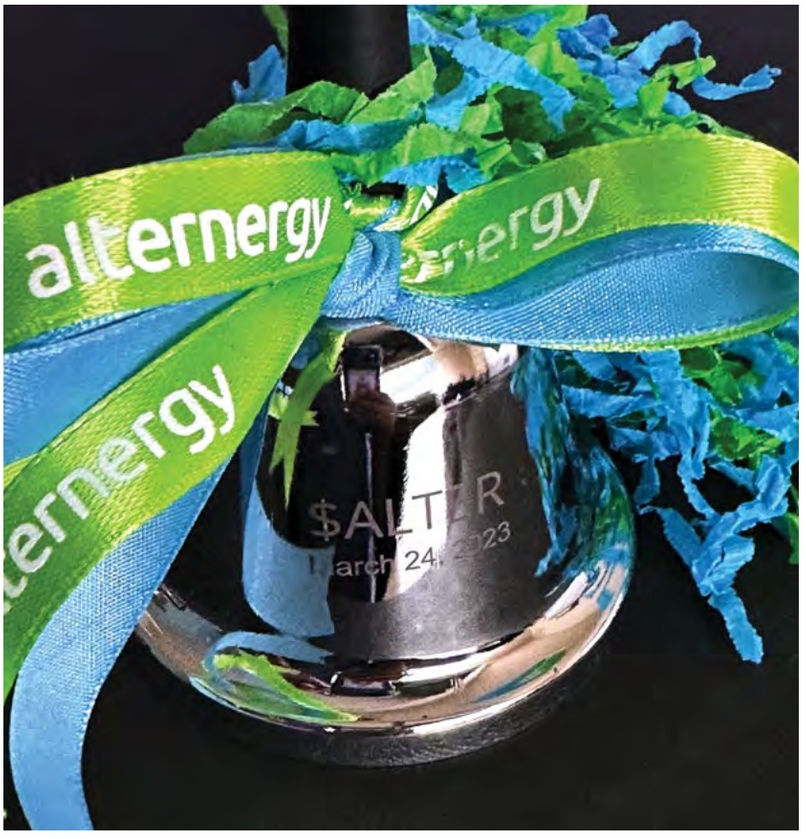
A total of 137 brokers participated in the IPO, including 74 'friends and family' individual investors consisting of Alternergy team members and their relatives who bought P32 million worth of shares. Chestnut Amatong assisted dozens of individual shareholders including office secretaries, drivers, engineers, accounting clerks, and managers at Alternergy in subscribing the required minimum of 10,000 shares, some of them participating in their first IPO. Many of Vince's relatives and former classmates also bought shares, as well as journalists who had interviewed the company's officers. The final tally showed that Vince and Alternergy's network of contacts were able to raise P726 million worth of orders.

Remarkably, the IPO was happening at a time when global financial institutions were jittery over the collapse of banks in the US and Switzerland. The month of March saw California regulators shutting down Silicon Valley Bank, which held the accounts of many tech giants in the region, while in Europe, UBS acquired Credit Suisse to avert a banking crisis. Alternergy offered shares to the public from March 13 to 15. "We were right smack in the middle of a global financial crisis, so that was a tough one," recalls Vince.

At the opening of the PSE'S trading day on March 24, Alternergy rang the bell and became officially listed with the stock symbol ALTER. Vince's good friend, Wilson Sy, a director of the PSE, attended the ceremony together with PSE President Mon Monzon. The company beat the deadline before their audited financial statements would lapse with just one week to spare.

In his speech during the Listing Ceremony, Vince said: "We've always been strong advocates for what we call green democratic capitalism, giving every Filipino family, every young professional, every family office the opportunity to ▸

▾ **The souvenir bell of Alternergy's IPO Listing**



participate in a renewable energy IPO and own a part of a green energy company. As a friend once told me, since we're all paying for electricity bills, we might as well be a part of promoting clean, sustainable, and reasonably priced electricity." That evening, Alternergy hosted a celebratory dinner for the entire Project Gaia IPO working group: bankers from the three underwriters, lawyers from three law firms, audit and tax partners from SGV, their independent directors, and most especially, the spouses of the Alternergy directors who had front row seats as witnesses to the long days devoted by the executives in accomplishing the first and largest IPO on the Philippine Stock Exchange in 2023. Each one received a souvenir bell. ▶

MARCH 24, 2023

Remarks during Initial Public Offering Listing of Alternergy Holdings Corp

As the first IPO for the year, Alternergy has once again proven to be a pioneer in joining the public equities market on the Philippine Stock Exchange.

We at Alternergy have always believed that renewable energy is a 21st century mega trend. We have always been strong advocates for what we call the "green democratic capitalism" — giving every Filipino family, every young professional, every family office, the opportunity to participate in a renewable energy IPO and own a part of a green energy company. As a friend once said, since we are all paying for our electricity bills, we might as well be a part of promoting clean, sustainable and reasonably priced electricity. And today, our long-held vision of green democratic capitalism has become a reality.

Having our roots as an employee-owned company, every Alternergy team member understands their responsibility to their new fellow shareholders. Each one of us is ready and will be proud to abide by the high standards of corporate governance, transparency, and accountability that is expected of us.

As we proudly mark this milestone on our 15th year, we are grateful to the board of directors of the Philippine Stock Exchange, the Listing Department, the Market Regulatory Division of the SEC,

for meticulously reviewing our eligibility to become a publicly listed company.

We wish to thank ICCP — our Sole Issue Coordinator, our Joint Issue Managers and Joint Lead Underwriters — BDO Capital and ICCP, and our Co-Lead Underwriter, UniCapital Securities, for raising P1.6 billion from a diverse investor community of industrial corporates, family offices, fund management companies, ESG funds, a government pension fund, and a vast number of retail investors and high net worth individuals.

We also recognize the invaluable advice from our legal, tax and accounting advisers: MVGS Law, Romulo Law, CASE Law, SGV Tax, SGV Assurance, and FTI Consulting.

I would like to acknowledge our board of directors, our independent directors Secretary Greg Domingo and Miss Tere Marcial, for their guidance and support during this IPO preparation process, and to our board adviser, former SEC Commissioner Eph Amatong, for nudging us to take the plunge of an initial public offering.

Finally, I would like to congratulate my hard-working partners at Alternergy, some of whom are co-founders of the company, each member of the Alternergy team and our family members. Together we all share this unwavering passion, of leaving behind a sustainable future for our next generation. Thank you. ■

◂ **August 4, 2023:** Alternergy Board has been active since the IPO. With Corporate Secretary Melissa Rosario-Lichaytoo, Assistant Corporate Secretary Sherleen Macatangay, Board Advisor Eph Amatong, Independent board directors, Marivic Españo, Tere Marcial, Greg Domingo, and executives of Alternergy

As a publicly listed company, Alternergy can now tap different sources of funding that were not previously available when it was still owned privately, says CEO Gerry Magbanua. "I think the most important element here is that it allows us to now think of our next level. Nowadays, we're being sought by institutional investors who only invest in publicly listed companies so we're getting that sort of exposure and interest," he says.

This means that the company is now in a position to own the majority or even 100% of the project subsidiaries it is developing in its renewable energy pipeline. "We've raised a total of P1.62 billion from the market that we didn't have a year ago, so that's available resources that we could deploy in strengthening the portfolio that we have," says Gerry.

In the next four years, Alternergy is scheduled to complete 10 projects in all three of its portfolios that will add almost 300 megawatts of power to its existing operational capacity of 67 megawatts. "Once we are able to reach a certain threshold, say we can achieve anywhere between 400 to 500 megawatts of renewable energy power that we are able to build, then we're talking of a different level after that. It's going up and up," Gerry says.

"Renewable energy in the Philippines is very young and technology has outpaced our legal regulations. Sometimes, we have no policies yet for certain aspects of the industry so these are exciting but also very challenging times," says General Counsel Ina Arriola.

As head of the legal team, she supports the technical teams with contract preparation and negotiation, as well as compliance with government regulations. "The company has a very collaborative culture and integrity is important. We do things the right way," Ina says.

With the change in ownership status, Alternergy is adapting to new requirements that were not part of its operations in the past. "We are extremely diligent in filing quarterly reports and annual reports within the prescribed deadlines," says corporate legal counsel Kim Pagdilao, who is responsible for PSE disclosures.

"If there is a decision from the board, if you have a press release of new projects that came into commercial operation, if there's a new officer joining the company, that has to be disclosed," says Kim. In some cases, information has to be relayed to the SEC and the PSE immediately. "There's some material information that you need to disclose within 10 minutes, like if you change your officers or if the board decides to close a deal, you need to disclose it right away because the share prices will be affected," Kim adds.

Another key requirement is the sustainability report, which falls on the shoulders of Alternergy's new Chief Financial Officer Carmen Diaz, who doubles as Chief Sustainability Officer. She joined the company in June 2023, just three months after the IPO, to pursue her passion for what she calls a "meaningful mission." She handled risk management and sustainability at RCBC before moving to the Asian Development Bank, where she worked for five years. "I'm trying to apply here what I learned in ADB because I'm interested in sustainability and my heart is really into development," says Carmen, who volunteers in river cleanups and other environmental advocacies in her spare time.

The additional tasks require more personnel, which is a relief for multitasking staff but also means some adjustment for a lean company. New team members have joined the firm since its ▸

▾ **November 24, 2023:** Alternergy directors at SEC Corporate Governance Seminar

> Renewable energy in the Philippines is very young and technology has outpaced our legal regulations, so these are exciting but also very challenging times.

IPO Listing, attracted to Alternergy's renewable mission. Aside from Carmen, there's Arman Ang who had a decade-long audit career and has joined as Financial Controller to support Louie Pangilinan, Alternergy's Treasurer since the early years. Bea Bathan is the new Investor Relations Officer, coming from foreign equity brokerage firms. Bill Haboc, with three decades of hydro development experience, is supporting Eduardo Martinez-Miranda with the Dupinga project. Snap Lopa signed up as External Stakeholders Manager from a leading renewable firm, while Angelica Mabel Cudiamat came on board as Financial Planning and Analysis Manager with Adrian Villaflor. Jen Panaligan-Taghoy joined as Retail Electricity Supply Manager. Even Margo Mananquil is rejoining Alternergy's wind team after a brief absence. "By attracting new talent to join our 'family', we are future-proofing Alternergy for the next level of intense activity," says Vince.

In addition, Vince is keen to continue lifting Alternergy's corporate governance, as a new publicly listed company. "We owe it to our public shareholders," he points out. Alternergy has invited eminent individuals to the board to join Independent Directors Tere Marcial and former Trade Secretary Greg Domingo. Former SEC Commissioner Eph Amatong became board advisor, bringing his extensive experience in the growing green capital markets to the table. Joining as the third Independent Board Director is Marivic Españo, after her early retirement as chairperson of the audit firm P&A Grant Thorton.

Meanwhile, co-founder Poch Ambrosio continues to work together with Vince and Gerry at the National Renewable Energy Board, and as president of the newly-formed Wind Energy Developers Association.

So far, Mike Lichtenfeld says there have been no dramatic changes internally and they intend to keep it that way. "I think we're really committed to trying to maintain the culture that we all value here, which is to have fun while we work. Let's make decisions together, let's have open communication, let's not be afraid to change course if we have to but let's keep the greater picture in mind," he says.

The Green Energy Auction in July 2023 of the Department of Energy boosted the fortunes of Alternergy further. The new facility replaced the feed-in tariff program with a bidding system that sets a ceiling price, as determined by the Energy Regulatory Commission, for different types of renewable technologies. A maximum number of megawatts per type of clean energy was also imposed for Luzon, Visayas, and Mindanao. "You bid a tariff lower than the ceiling price. You also select the year when you intend to complete construction of your project. And if you don't complete the project on time, there is a penalty. Under Energy Secretary Popo Lotilla, the DOE wanted to jumpstart renewable energy and aside from the Green Energy Auction, he ▶

▼ **July 3, 2023: Team celebrating its three winning bids in the Green Energy Auction**

▶ **July 17, 2023: ANC Digital Headline on Alternergy successful Green Energy Auction bids**

also launched initiatives to increase the renewable portfolio standards, loosen foreign ownership of solar and wind projects, and promote offshore wind," Vince explains.

In a speech at the Workshop for Offshore Wind Development organized by the DOE and United States Agency for International Development on October 26, 2023, Lotilla said the country's Philippine Energy Plan is looking at a Clean Energy Scenario that will increase the share of renewable energy in the national grid to 50 percent by 2050.

"We also expanded our options for private sector engagement so that RE developers can compete under our green energy auction openly and transparently," Lotilla said.

At the auction in July, Alternergy won the bid for three projects — the Tanay and Alabat wind farms, and the Liberty Solar Farm in Tarlac. "That is a big enabler because we're assured of the market for these three projects. It's all about execution now, and we take comfort in the fact that we've done it already. It's just a matter of replicating what we do well," says Gerry.

"The nice thing about the Green Energy Auction is that it's similar but it's also an improvement on the feed-in tariff program," says Mike. "It's similar in the sense that the government is essentially guaranteeing an offtake through Transco. The difference is, you bid first and then you are awarded, and then you must build it according to your plan, but you already have your allocation. I think it's a much better program and it will be more successful." Previously, developers had to build the project first before they were given an allocation, which left some renewable energy companies scrambling for an offtake client when competitors snagged the limited volume per technology much earlier.

With the huge amount of financing needed for the three projects, Alternergy moved quickly with back-to-back corporate finance activities. On October 11, 2023, they mandated three investment houses to raise P12 billion in project financing for the Tanay and Alabat projects. In addition to their long-term banking relationship, RCBC, Alternergy invited two new banks, Bank of the Philippine Islands and Security Bank.

The following month, on November 7, 2023, the state pension fund Government Service Insurance System (GSIS) led by President and General Manager Wick Veloso subscribed for P1.45 billion in new non-voting perpetual preferred shares, boosting the equity base of Alternergy. This is in addition to GSIS' participation in Alternergy's IPO. Together with the P1.62 billion fresh equity raised from the March IPO, the company has raised P3 billion in capital in only nine months, says Gerry, quickly boosting Alternergy's ability to fund its project pipeline.

After receiving new financing from the government pension fund, Alternergy embarked on Project Sunrise, a bold expansion of its holding company's financial muscle with so-called "Green" corporate loans underpinned by its triple play renewable portfolio. "We appointed BDO Capital as Mandated Lead Arranger for our Green Corporate Loans. We need these funds for investment purposes, to roll out our accelerated project pipeline," says Carmen.

At around the same time, in November 2023, the Monetary Board of the Bangko Sentral ng Pilipinas allowed Philippine banks to provide an additional single borrower's limit of 15% for environment-friendly projects. In January 2024, the Insurance Commission approved the company's Green ▶

▼ **June 3, 2024: P8 Billion loan signing for Tanay Wind Project. Seating L to R: Yvette Mari de Peralta, Barbara Untalan, Juan Carlos Syquia, Gerry, Vince, Knud, John Ong, Yvonne Marcelo, Virgilio Chua. Standing L to R: Eduardo Martnez-Miranda, Adrian Villaflor, Mabel Cudiamat, Bea Bathan, Ina Arriola, Carmen Diaz, Mike Lichtenfeld, Chestnut Amatong, Annette Rafael and Arman Ang**

BusinessWorld

Alternergy raises P3-B equity since March IPO — president

By Sheldeen Joy Talavera
December 20, 2023

ALTERNERGY Holdings Corp. announced on Tuesday that it has raised a total of P3 billion in equity this year, including an investment from the Government Service Insurance System (GSIS).

7 November 7, 2023: GSIS Subscription Signing Ceremony. Above, left to right: Knud, Carmen Diaz, Board Advisor Eph Amatong, Gerry, Vince, GSIS President and General Manager Wick Veloso, independent Director Marivic Españo, Ina Arriola, GSIS EVP Mike Praxedes, Independent Director Secretary Greg Domingo

Corporate Notes as an acceptable investment for insurance and pre-need firms. This approval opened a new capital market for Alternergy.

The Asian Development Bank provided technical advice in preparing Alternergy's Green Finance Framework, which was independently assessed by DNV GL, a global certification firm, and found to be compliant with the standards of the Green Bond Principles, the Green Loan Principles, and the ASEAN Green Bond Standards. The certification paved the way for Alternergy to offer green-labelled financial instruments to sustainability-focused investors.

With the policy support from regulators in place, Alternergy actively executed its accelerated growth strategy. The company listed the GSIS perpetual preferred shares on March 22, 2024, the first anniversary of its IPO, under the ticker symbol ALTP2, thus boosting its equity base. ▶

GMA NEWS ONLINE
LATEST NEWS FROM THE PHILIPPINES AND AROUND THE WORLD

GSIS pours P1.45B into renewable power firm Alternergy

By Ted Cordero
November 7, 2023

THE GOVERNMENT Service Insurance System (GSIS) is investing over a billion pesos in listed renewable energy firm Alternergy Holdings Corporation.

BusinessMirror

Alternergy income surges to P121 million

By Lenie Lectura
February 9, 2024

ALTERNERGY Holdings Corp. recorded a net income of P121 million from July 2023 to December 2023 — the first semester of its fiscal year 2024 — from the P879,000 recorded in the same period in 2022.

ADB ASIAN DEVELOPMENT BANK

ADB supports Alternergy's first green corporate loan

May 31, 2024

◀ **May 31, 2024:** Asian Development Bank provided technical assistance to Alternergy's Green Finance Framework

MANILA BULLETIN

Alternergy revenues up 44% due to Palau Solar BESS

By Gabriell Christel Galang
May 13, 2024

Because of a newly energized battery energy storage system (BESS), renewable power firm Alternergy Holdings Corp. was able to beef up its financial revenues for the fiscal year 2024.

> As the world continues to navigate the complexities of climate change and energy security, companies like Alternergy are leading the charge towards a greener and more sustainable future.

In the summer months of 2024, the wind development team was preoccupied with groundbreaking and the start of construction of the Alabat and Tanay projects. The solar development team finalized the EPC contract and commenced construction of the Solana project. They accelerated the permitting process of the Liberty aqua-voltaic project while exploring potential solar farm sites in Bulacan, Pangasinan, and Sultan Kudarat. The hydro development team was closely supervising construction of the Dupinga and Kiangan run-of-river projects, while pursuing pre-development of the Lamut Asipulo hydro project. Alternergy's office was buzzing with multiple team huddles and concurrent meetings with lenders, contractors and prospective investors, such that the company had to rent meeting rooms outside their office. With the growing number of team members and projects, it has become necessary for Alternergy to expand its office space.

May 2024 was a busy month for Alternergy. The first tranche of the P2 billion Green Corporate Loans was issued. Up to P13.3 billion in non-recourse project financing for Alabat and Tanay projects was sealed with three project lenders: Bank of the Philippine Islands, Rizal Commercial Banking Corporation, and Security Bank. Groundbreaking ceremonies were held for its new wind and solar projects, and notices to proceed with construction were issued to its contractors. The new office extension was ready by the end of May.

philstar GLOBAL

Alternergy unit secures P8 billion for wind energy project

By Jasper Emmanuel Arcalas
May 29, 2024

ALTERNERGY through indirect wholly owned subsidiary Alternergy Tanay Wind Corp. secured the financing from Ayala-led Bank of the Philippine Islands (BPI) and Security Bank Corp., which serve as co-lenders its renewable energy projects.

Bilyonaryo

Sy-blings' BDO backs Alternergy's renewable ventures with P2 billion loan

May 30, 2024

THE Asset 25

Philippines' Alternergy secures first green corporate loan

Proceeds of the ADB-backed loan to finance wind farm projects.

May 31, 2024

8

9

8 May 30, 2024: Signing of Alternergy's First Green Corporate Loan with Banco de Oro Unibank and BDO Capital. Seated (left to right): Gerry, Ed Francisco, Vince, Charles Rodriquez, Reynaldo Tanjangco. Standing (left to right): Ina Arriola, Carmen Diaz, Barbara Mae Billano, Felicisimo Falcon

9 June 3, 2024: (Left) Office entrance with Wheng Olano and Janna Gado; (right) blessing of the new office expansion

In only 15 months since its IPO Listing, Alternergy's management team has accelerated the deployment of more than P20 billion in capital, faster than its earlier forecast of investing the same amount in three to five years that Gerry Magbanua announced on the week of Alternergy's listing. The company is rapidly growing towards its goal of 500 MW of renewable capacity, as early as 2026. This was made possible, as one independent board director commented, "by a great management team that blends well, is efficient and supportive, and knows how to have fun."

The heightened level of activity has garnered praise, with one journalist writing in BNN:

"Alternergy's recent financial accomplishments and its commitment to renewable energy projects signal a promising future for the company and the renewable energy sector as a whole. As the world grapples with the consequences of climate change, Alternergy's success story serves as a beacon of hope, showcasing the potential of renewable energy to transform industries and contribute to a sustainable future."

"In the wake of Alternergy's financial triumph, it is evident that the renewable energy sector is not only a viable alternative to traditional energy sources but also a lucrative investment opportunity. As the world continues to navigate the complexities of climate change and energy security, companies like Alternergy are leading the charge towards a greener and more sustainable future." ■

Republic of the Philippines
PHILIPPINE NEWS AGENCY

Alternergy's aggressive fundraising to hike RE capacity

By Kris Crismundo
June 3, 2024

AGGRESSIVE FUNDRAISING. Alternergy president Gerry Magbanua holds a press briefing at Alternergy Holding Corp.'s headquarters in Makati City on Monday (June 3, 2024). He said Alternergy has raised PHP20 billion in 15 months since its initial public offering in March 2023. *(PNA photo by Kris M. Crismundo)*.

Bilyonaryo

20 billion reasons for Vince Pérez's excitement: Alternergy goes full throttle on clean power projects

June 3, 2024

ALTERNERGY Holdings Corp., led by former energy secretary Vince Pérez, has secured over P20 billion through capital raising activities in the 15 months since its March 2023 initial public offering (IPO).

As one of the co-founders of Alternergy, and having seen the growth of renewable energy in the Philippines for 20 years now, Knud finds it encouraging to see a lot of positive moves from the government. "These are programs we have not seen before. There's still a lot to be done, especially in grid infrastructure, but these initiatives are all steps in the right direction," Knud says. "It's good that renewables are mentioned again and again. The future looks bright."

Gerry shared Knud's optimism in his President's Report during Alternergy's first Annual Shareholders Meeting as a publicly listed company in December 2023:

"As we stand on the precipice of a future shaped by sustainable energy, Alternergy is poised to lead the way. Our journey, from a small renewable energy company to a key player in the energy and power industries, has been nothing short of remarkable.

Together, we have pioneered, powered, and inspired change. The path ahead holds exciting possibilities, and with your continued trust, Alternergy is ready to embrace the challenges and opportunities that come our way.

Let us forge ahead, not just as shareholders and stakeholders, but as partners in a shared commitment to a sustainable and resilient future.

Thank you for being a part of the Alternergy story. The best is yet to come, and together, we will illuminate the path to a brighter, cleaner, and more sustainable tomorrow for future generations.

We pioneer. We power. We inspire. Thank you."

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About the Author

YASMIN ARQUIZA is the editor and author of more than 20 books on a wide range of environmental topics. She has worked as an international news reporter for Agence France-Presse and Associated Press, a community journalist for *Bandillo ng Palawan*, and managing editor for GMA News Online. A graduate of the University of the Philippines and the New School for Social Research in New York, she was awarded a Bellagio fellowship for the Reuters Foundation Programme at Oxford University and a Ford Foundation International Fellowship Program scholarship at the Asian Institute of Management. She is the founder of Pawikan Press, an independent publishing house that specializes in books about the culture and environment of Mindanao and Palawan. ■

CHASING THE WIND, THE SUN, AND THE RIVER

The Story of Alternergy

From boardrooms to classrooms, from windswept ridges to raging upland rivers, and from sun-soaked idle lands to scenic islands in the Pacific Ocean, the stories in this book will take readers to the highs and lows of Alternergy in the first 15 years of its existence. It is a valuable resource for renewable energy entrepreneurs and climate activists, containing many essential lessons on how to avoid the pitfalls of the industry. The success of Alternergy dispels the widespread notion that climate-friendly practices and economic growth are incompatible, as it has achieved both financial and environmental goals. Most of all, local communities and employee welfare are very much part of the mix, with a wealth of personal narratives on how companies can work smart and have fun at the same time.

Alternergy Holdings Corporation
2024