

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

DATE : 16 JUL 2016

DAY : Saturday

DENR

IN THE NEWS

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

SOCIAL, ENVIRONMENTAL IMPACT TO CARRY MORE WEIGHT

Lopez wants airtight mining-audit criteria

By JONATHAN L. MAYUGA [@jonlmayuga](#)

THE mining-audit criteria now being finalized by the Department of Environment and Natural Resources (DENR) will not just be about the technical aspects of mining operations, something big miners are confident of hurdling.

SEE "LOPEZ," A2

30%

The percentage of mining firms in the country that secured ISO 14001 certification as of June 30

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

Lopez. . .

CONTINUED FROM A1

For the new DENR chief, the impact on people and the environment will get more weight.

"We will suspend all mining operations that lead to suffering and destroy the environment. The audit will not just be technical, it will [also be] social and environmental," Environment Secretary Regina Paz L. Lopez said in a text message.

Lopez already ordered a moratorium on the approval of new mining projects, aside from the mining audit to evaluate the performance of all mining operations, including extraction of nonmetallic minerals, quarry and small-scale mining.

Asked if the mining audit criteria would also lead to the imposition of higher fines, she said: "I honestly don't know if that's in my area of decision. [I] will find out."

The DENR's Mines and Geosciences Bureau (MGB) will release the criteria that will be used to rate the performance of mining companies in operating their mines.

The criteria, MGB Director Leo L. Jasareno said, are not "new" and have been in the rules ever since. It would be in accordance with the Philippine Mining Act of 1995, Executive Order (EO) 79 and DENR Administrative Order 2015-07, which requires mining companies to secure an International Organization for

Standardization (ISO) 14001 certification.

"They [audit criteria] are not new. They have just been there as part of the rules. They are just being included as part of the audit criteria," Jasareno said.

Lopez, Jasareno added, wants the audit to be airtight and mining companies penalized based on the soon-to-be released criteria.

One of such criteria that would warrant possible stoppage of operation is the ISO 14001. It sets out the criteria for an Environmental Management System (EMS). It maps out a framework, which a company or organization can follow to minimize impact to the environment, comply with applicable laws, regulations and other environment-oriented requirements, and continually improve their operation.

Failure to comply with the requirement could lead to the suspension of the company's environmental compliance certificate (ECC) and nonissuance of ore transport and/or mineral export permit.

Only about 30 percent of the more than 40 mining companies operating in the Philippines have secured ISO 14001 certification as of June 30, the deadline set by the order signed last year by Lopez's predecessor, Ramon J.P. Paje.

"We are now coming up with a criteria in the conduct of the new mining audit. There will be a rating system, wherein mining companies would be evaluated based on their performance," Jasareno said.

He said: "We want to see whether a specific violation would warrant suspension of operations."

Jasareno added that the various complaints filed against mining companies would also be considered in the conduct of the mining audit.

The DENR-MGB central office receives copies of various complaints filed against mining companies at the city, provincial and regional level of the MGB. The MGB's field offices are authorized to take appropriate measures based on their assessment on the ground, but Jasareno said the DENR-MGB will now conduct ground validation of the complaints, as well.

Meanwhile, Jasareno said that, as part of the previous mining audit under EO 79, the MGB had already caused the cancellation of 12 idle mining contracts and the suspension of 12 nickel mines for various violations of the mining law since 2012.

He said more than half of the 40 operating large-scale mines are frequent violators, but none of them were considered as "serious violations."

The companies violating the conditions of their contract, majority of which were also slapped with equivalent amount of penalty depending on the discretion of who conducted the review, were suspended for a period ranging from one to three months.

Jasareno said the violations were mostly "minor" that warranted mere "slap in the wrist." The most serious offense committed under the ongoing performance evaluation under EO 79, he said, was in 2014 in the province of Zambales, wherein all four nickel mines were issued suspension orders.

Two of the mines, which were issued

a temporary lifting order for substantial compliance of the conditions set by the MGB, were issued a preventive suspension order on July 7 on account of the Supreme Court writ of Kalikasan issued on June 21, and EO 1 issued by the provincial government of Zambales on July 1. The orders, in effect, stopped all mining operations in the province.

The Chamber of Mines of the Philippines (COMP) had earlier challenged the DENR and the MGB to release the result of the first review mandated by EO 79.

Sought for his reaction, Jasareno said 12 nonperforming mining contracts have been canceled by the DENR as a result of the ongoing review. This, he said, is in line with the "use it, or lose it" policy under the Aquino administration and Paje.

As far as the violations of operating mines are concerned, most involve housekeeping, failure to put up appropriate signage and maintaining the cleanliness of the mining facility.

"If there were serious offense, it would have warranted indefinite suspension or closure," Jasareno said.

He said the nickel mines were suspended for "exceeding the TSS or total suspended solid" of wastewater discharged by the companies. This led to the discoloration of water bodies, such as rivers or coastal waters, in Zambales.

"Exceeding suspended solid of discharge by mining companies from water impoundment to water bodies, under the ECC, you are penalized," he said. "Depending on excess [TSS limit], there is corresponding penalty."

The Manila Times

16 JUL 2016

DATE

B-2

PAGE

UPPER HALF

LOWER HALF

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

MGB taps US-developed web-based tool to fight illegal mining

THE Mines and Geosciences Bureau (MGB) will be using a web-based program starting this year that would streamline the enforcement of environmental laws to better fight illegal mining in the country.

The newly developed program is called the Environmental Law Enforcement Management Information System (ELEMIS).

MGB Director Leo Jasareno said ELEMIS, which is being developed

with the assistance of the United States Fish and Wildlife Service, would streamline the enforcement of environmental laws through the inclusion of investigation protocols and serve as the repository of related information.

He said this would aid field officers, managers, prosecutors and other users in gathering and preserving evidences, generating comprehensive statistical reports, allocating resources, determining

investigation cases' sensitivity levels, assessing cases and policy impacts, and monitoring of cases.

It is also capable of linking with other related information management systems to expand its network of information sources, Jasareno said.

MGB personnel recently attended an ELEMIS conference held in Colorado to officially start the development of the ELEMIS program.

It was spearheaded by the

Department of Environment and Natural Resources' Knowledge and Information Systems Service, with representatives from the MGB, Biodiversity Management Bureau, Forest Management Bureau, and National Bureau of Investigation.

MGB has already conducted a training seminar on the Rules of Procedure for Environmental Cases to better equip the MGB with capable technical personnel and lawyers for

the increasing number of environmental cases in the past five years, and with the possibility of more environmental cases involving mining.

The seminar was also aimed at providing technical personnel with adequate knowledge on legal principles and proceedings and to organize a pool of confident and competent potential witnesses in the MGB Central and Regional Offices.

A court trial simulation was also

held where participants played the roles of lawyers, judges and witnesses to give MGB personnel a more active and in-depth participation in cases filed in courts.

Engr. Larry Heradez, officer-in-charge of the Legal Service Division, said that the training seminar was timely considering that environmental cases filed in different courts have been increasing.

JAMES KONSTANTIN GALVEZ

The Manila Times

16 JUL 2016

DATE

B3

PAGE

✓
UPPER HALF

LOWER HALF

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

Philex Mining will pass audit

BY KRISTYN NIKI M. LAZO
REPORTER

BUSINESS tycoon Manuel Pangilinan welcomes the stricter audit of mining companies by the Department of the Environment and Natural Resources and expressed confidence that Philex Mining Corp. will pass the audit.

Asked if he thinks Philex Mining can pass the audit of the DENR, Pangilinan said: "I believe so. We are ISO certified already so I think we welcome the audit. We believe we are compliant with the mining law so let's see how this pans out."

New DENR Secretary Gina Lopez has said that being ISO certified was not an assurance that mining firms would pass the audit and that the DENR would stay true to its commitment of detecting violators of environmental laws.

The Philex Mining chairman said he "agrees" with the DENR secretary and added: "If they (ISO certified firms) are violating certain laws, that's for sure, I agree with her. We welcome the audit."

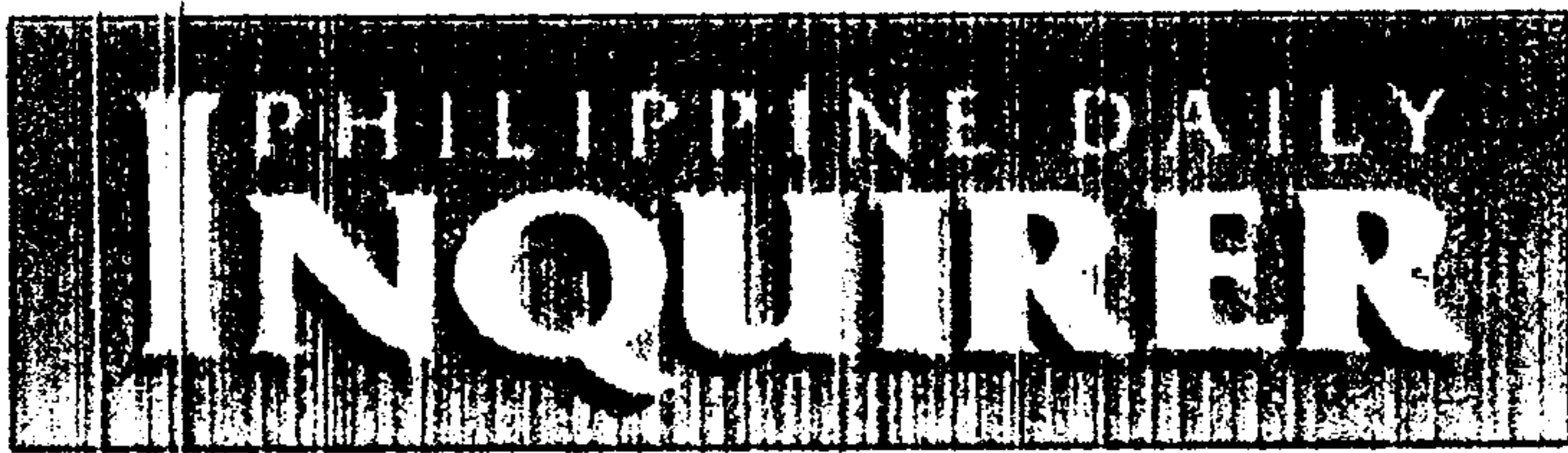
On July 8, just a week after she assumed office, Lopez already suspended four violators who had been issued with a Writ of Kalikasan earlier: BenguetCorp Nickel Mines Inc., Eramen Minerals Inc., LNL Archipelago Minerals Inc., and Zambales Diversified Metals Corp.

A Writ of Kalikasan is issued to protect the country's constitutional right to a healthy environment. It is based on Section 16, Article II of the Constitution, which states: "The state shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature."

The DENR started the audit on mining firms on July 1. According to Lopez, it was mandated by President Rodrigo Duterte himself.

Lopez, who has been a longtime anti-mining advocate, told mining companies before to "get their act together" in practicing responsible mining, saying that the "poorest areas in the Philippines are mining areas."

16 JUL 2016



DATE
A 14
PAGE

UPPER HALF
✓
LOWER HALF

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

PH can't do away yet with coal for baseload

I FULLY support the stand of the Duterte administration that a mixed-energy use policy—combining baseload plants powered by coal and natural gas along with renewables, such as solar, wind, hydropower, biomass, among other sources—is the most practical for the country at this stage of our economic development.

New Energy Secretary Alfonso Cusi is right: “Coal is the more dependable, the more reliable source for baseload. We cannot afford to rely solely on renewables.”

Industry studies indicate that we need an additional 10,000 MW to 12,000 MW between now and 2030 to sustain our economic growth. Given this, we cannot abruptly drop plans to build and operate coal-fired power plants.

Coal power is readily available here and remains the most affordable option for developing economies like the Philippines. This energy source is highly efficient and cost-effective.

Overzealous environmentalists insist that the Duterte administration should remove coal from its energy reform agenda and fully rely instead on renewables or clean energy. However, renewables are very expensive to

develop and maintain.

A comparison of Feed-in-Tariff (FIT) rates for coal and renewable energy sources shows that coal is the cheaper option. The FIT rate for coal runs to only P4.2079 per kWh, while the rate for wind power is almost double at P7.40 per kWh. The FIT rate for solar power is even more expensive at P8.69 per kWh. What this means is that consumers will actually pay more for renewable sources of energy at this time.

Environment Secretary Gina Lopez has said she does not want coal-powered plants and would prefer the establishment of more power plants fired by renewables. That could be a prescription for a coming “Dark Age” in this country, which will certainly engulf us if coal-fired power plants are all shut down.

But is that the environmentalist Lopez speaking, or is it because her family's business interests include the Energy Development Corp., which operates several geothermal, wind and solar power facilities, and First Gen Corp. which owns natural gas plants? Just asking.

—EUNICE GABRIELLE DATOY,
eunicegxbrielle@gmail.com

Coal activist's murder fuels 'green' movement

CITY OF SAN FERNANDO—Slain anticoal activist Gloria Capitan was remembered and honored on Thursday as advocates of renewable energy stepped up the environmental campaign.

"As we remember her legacy, as well as the lives of those who were killed for opposing coal operations in their respective countries, we also bear in mind that the anticoal movement has never been stronger than it is now," said Ian Rivera, national coordinator of the Philippine Movement for Climate Justice, during the launch of the "Ending the Age of Coal" campaign in Quezon City.

Shot dead by a lone gunman on July 1, Capitan, 57, was president of Samahan ng

Nagkakaisang Mamamaya ng Lucanin (SNML) that clamored for the closure of an open-coal storage facility in Mariveles town in Bataan province.

She was buried on Sunday with no clear answers from policemen investigating her murder. The Bataan police said no evidence so far has linked her killing to her advocacy.

There are 15 coal-fired power plants that operate in the country and 29 more are proposed.

In a statement, Rivera said the movement for a more sustainable and people-centered energy system is "getting stronger" because the Climate Change Commission has ordered a review of proposed coal projects while President Duterte and Environment Secretary Gina Lopez have stated pro-renewable energy pronouncements.

For the Philippines to meet its commitment to reduce emissions and combat the rising global temperature, the government should order a stop to the use of coal as a source of power, Rivera said.

Gerry Arances, convenor of the Center for Energy, Ecology and Development, said the anticoal movement abroad has grown.

"In the past few years, however, many countries like Norway, Denmark and even state governments from the United States have stopped funding coal projects, as a response to growing pressure from grassroots movements and environmental lobbyists," Arances said.

He said China and India have started phasing out coal operations.

"A recent study from Oxford University has found that coal power plants are more and more becoming 'stranded assets,' meaning they are likely to be kept running in spite of the technology being obsolete and unprofitable economically," he said.

The Philippines, he warned, could end up having "outmoded, costly and destructive energy resource" if it continues using coal.

Tonette Orejas, Inquirer Central Luzon

16 JUL 2016

Daily Tribune

WITHOUT FEAR OR FAVOR

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

DATE

Front page (#4)

PAGE

✓
UPPER HALF

LOWER HALF

No concession to China

Philippine diplomatic and political ties with Asia's economic and military superpower China remain tenuous, what with officials of the new administration, who are the alter ego of President Duterte saying the Philippines will concede nothing to China and will not sacrifice the Hague Tribunal's decision for bilateral talks with China.

Duterte's foreign secretary, Tomas O. Ysay, urged Beijing on Thursday to respect an international tribunal's ruling that rejected Chinese claims to most of the South China Sea.

No bowing to Hague ruling This photo taken on July 14, 2016 shows Chinese ships putting out a fire on a mock cargo vessel during an emergency drill in the South China Sea near Sansha, in south China's Hainan province. "China warned on July 14 of a 'decisive response' to provocations in the South China Sea, as it faced mounting pressure to accept an international tribunal's ruling against its claims to most of the strategically vital waters." AFP

Daily Tribune

WITHOUT FEAR OR FAVOR

16 JUL 2016

DATE

7

PAGE

UPPER HALF

LOWER HALF

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

No concession to China — RP

ina Sea had no legal basis. vowed to ignore the ruling, the UN-backed tribunal had no jurisdiction over the case and was full of bias.

Calida said on Monday that the dispute should not be on the ASEM agenda, with foreign minister Kong insisting the meeting was not an appropriate venue to discuss the issue.

Calida said it was included during the meeting.

The ASEM summit brings together leaders from 16 nations from Asia and 10 from other sea regions including Vietnam and Malaysia.

Key words from RP

The Philippines will concede to China as it seeks to settle an international tribunal against Beijing's claims to the South China Sea, its top lawyer said Friday.

The UN-backed tribunal on Monday ruled against China but rejected the decision, calling for a "decisive response" to take actions against its claims based on the

South China Sea arbitration to shake China's resolve to pursue a path of peaceful development, a State Councilor said by Xinhua.

A Beijing, Chinese State Councilor Yang Jiechi yesterday said the South China Sea arbitration will in the slightest way "shake China's resolve to pursue the path of peaceful development."

He made the remarks in an interview with state media on the eve of the award of the Arbitral Tribunal for the South China Sea.

He said peaceful development is a matter of expediency. It is not a choice China has made with the trend of the time and its fundamental interests,"

He said China remains committed to developing friendly relations with other countries on the basis of the Five Principles of Peaceful Co-existence, and promoting win-win cooperation and harmony with its neighbors.

He said China adheres to negotiation and dialogue as a means for resolving relevant territorial and delimitation issues, and

resolutely safeguards peace and stability in the region, he said.

The Hague-based tribunal handling the South China Sea arbitration case unilaterally initiated by the former Philippine government issued its final award on Tuesday, denying China's long-standing historical rights in the South China Sea.

In response, China issued two statements on July 12 and on July 13, a White Paper entitled China Adheres to the Position of Settling Through Negotiation the Relevant Disputes Between China and the Philippines in the South China Sea, stating China's solemn position of non-acceptance and non-recognition of the award and reaffirming China's territorial sovereignty and maritime rights and interests in the South China Sea.

Stressing that China's position on the arbitration fully complies with international law, Yang said the basic fact has been thoroughly elaborated in a series of position papers issued by the Chinese government.

"The attempt to mount an all-out smear campaign against China by distorting this basic fact has once again exposed the nature of this arbitration, that is, a farce in which certain countries use international law as a cover to pursue their own hidden agenda," said Yang.

In response to the role of some non-regional countries, Yang said the South China Sea arbitration "is a case in point of how non-regional countries interfere in the South China Sea issue."

He said in recent years, certain countries outside the region, driven by their own agenda, have frequently intervened in the South China Sea issue under the pretext of upholding "freedom of navigation" and "maintaining regional peace," leading to an escalation of tension.

"Such highly irresponsible moves have become the major source of risks that affect peace and stability in the South China Sea," Yang said.

The South China Sea issue is an issue between littoral countries and should be left to the countries concerned to resolve through peaceful negotiations, Yang said.

He said China has never rejected the legitimate rights and interests of non-regional countries in the South China Sea, calling on relevant countries to respect the

independent choice of China and its neighboring countries in the South China Sea and do more to facilitate sustained peace and stability in the region.

On the China-Philippines ties, Yang said the arbitration is a major political obstacle to the improvement of relations between China and the Philippines, calling on the new Philippine government to bear in mind the common interests of the two countries and the broader picture of bilateral ties and properly handle relevant issues.

The South China Sea issue is not an issue between China and Asean, said Yang, adding that China will maintain communication and consultation with those Asean member states who are directly concerned to address the specific disputes in a proper way.

DU30 names FVR to start China-RP talks

Duterte announced late Thursday he would send a former president, Fidel Ramos, to China to start talks on the ruling of The Hague-based Permanent Court of Arbitration.

Solicitor-General Calida stressed Friday there would be no concessions to China.

"We value the award given by the (tribunal), and the Philippines will not concede any of the awards given to us," Calida said, using the legal term for the ruling.

But the Solicitor General clarified that for alternative means, the country "will also pursue diplomatic means to convince" China that we have to coexist peacefully, this was said despite China's statements.

In a press conference, China's Foreign Ministry Spokesman Lu Kang again lashed out at the PCA's jurisdiction and legality as an international court to hear this case, reiterating "China will never accept the absurd argument that the illegal conclusion of an unlawful arbitration court is legally binding," pointing out that Philippines' territorial sovereignty-related claims fall outside the jurisdiction of UNCLOS.

The Philippine counsel to the arbitration case, Lawrence Martin, firmly stands on the position that the award is clear and binding, "China has to accept that any talks have to use the award as foundation or basis."

No legal basis-PCA

The tribunal found there was no legal basis for China to claim historic rights to resources in areas falling within its nine-dash line, which is based on a vague map that emerged in the 1940s.

The nine-dash line overlaps with waters also claimed by the Philippines, Brunei, Malaysia, Taiwan and Vietnam.

The tribunal also ruled Beijing had violated the Philippines' sovereign rights to exploit resources in waters up to 340 kilometers beyond its coast, called its exclusive economic zone.

China had built artificial islands atop seven reefs in the area, inflicting severe environmental damage, the tribunal said.

"We will use diplomacy. I believe this is the most peaceful way of settling this," Calida said, adding Duterte had set no timeframe for achieving results.

"We will be patient of course and hopefully China will show the same grace that we have shown," Calida added.

Duterte, who took office on June 30, has said he wants better relations with China and to attract Chinese investment for major infrastructure projects.

Ramos, who served as president from 1992 to 1998, is also known to favor close ties with China. However he has yet to accept the mission.

Sino-Philippine relations plummeted over the maritime row under Duterte's predecessor Benigno Aquino, whose government filed the arbitration case in 2013.

Senior Supreme Court associate justice Antonio Carpio warned Friday it would be illegal for Manila to jointly develop with China or any other country the resources in the areas adjudicated as part of the Philippines' exclusive economic zone.

Carpio, a member of the Philippine team that brought the suit against China, told a public forum the Philippine constitution reserved the "use and enjoyment" of the resources in this vast maritime zone exclusively to Filipinos.

But he said Manila may engage foreign entities as contractors to extract or develop these resources.

In response, Calida said: "Certainly we will not do something illegal or unconstitutional."

Joyce Ann Rocamora and AFP

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

Small steps result in big impact

By Charles E. Buban

WHEN it comes to making eco-friendly changes there are little things that really add up to make a difference. Since most of these changes could be done at home as well as school, environmental solutions provider World Wide Fund for Nature (WWF)-Philippines and Filipino pharmaceutical company Pascual Laboratories Inc. (PascualLab), through its Sowing to Empower, Educate and Develop (Seed) CSR initiative, have been visiting select public schools to establish the link between climate change and wellness, highlighting simple ways that their audience could apply to protect their health while minimizing their ecological impacts.

Since 2012, the multiyear Environmental Education (EE) program called "Kalakasan, Kalikasan" has been implemented in 10 schools, involving over 6,400 students and 1,405 parents while training 32 teachers.

A typical session involves teaching students about the importance of washing their hands to prevent the transfer of diseases; getting more physically active like playing outdoors; eating nutritious food and supplementing these with vitamins; and drinking eight glasses of water daily.

The sessions also discuss how to rid houses of possible pests and disease-carrying insects; the impacts of climate change on the environment and on human health; and utilizing organic, herbal medicine as a solution to illnesses such as cough.

Expectations

Both the WWF-Philippines and PascualLab recognize what many scientists have been expecting: A warmer world brings changes in the mechanisms that spread some diseases (disease vectors). Insects previously stopped by cold climates are already moving to new locations. Heavy rain and heat create conditions that are more favorable to the mosquitoes that transmit potentially deadly diseases.

"Many diseases stem from changing weather patterns," explains WWF EE unit head Ruel Bate. "Strong rains can turn ditches into stagnant pools, which can be prime breeding spots for mosquitoes that carry viruses like dengue. Identifying practical solutions to these problems—like clearing areas in our homes which can become breeding grounds for insects or ridding our homes of anything which can gather standing water—are effective climate adaptation measures. Our aim is simple—to promote better health through a healthy environment."

The program started as a means of educating students and quickly expanded to teaching other members of the households.



ORGANIZERS of Kalakasan, Kalikasan program found that teaching environmental topics brought out unexpected responses in the students and their parents and teachers.

From 2015 to 2016, the program was further enhanced by replacing old multimedia materials with new visual aids.

Sessions are now conducted in classrooms where PascualLab employee-volunteers take on a bigger role in helping teach the kids. "PascualLab's mission is to provide the most family-friendly health and wellness products in every community where we are present. As we aim to build strong, healthy families, we think that one of the ways we can achieve this is by caring for our environment. We share WWF's belief that there is a direct relation to the state of every Filipino's health and the way we treat our Earth. Not only do we want to be part of the solution through our products, but we also want to take our work a step further and take an active part in educating others about climate change and its effects on health," said PascualLab corporate communications director Mia Pascual Cenyon.

"Kalakasan, Kalikasan" began in 2012 at the Krus na Ligas and Esteban Abada elementary schools in Quezon City and involved 955 elementary students and parents plus a dozen teachers.

In 2013, the program's second phase

reached four public elementary schools in Quezon City: Esteban Abada, Batasan Hills, Old Balara and Kamuning, teaching 1,805 students and training 20 teachers.

The third phase, which happened in 2014, covered 1,285 students and three elementary schools: Esteban Abada, Sto. Cristo and Old Balara.

The recently concluded fourth phase retained Sto. Cristo and Kamuning elementary schools and added two more, Tomas Morato and General Roxas. This latest phase covered over 2,000 students and facilitated by employee-volunteers of PascualLab.

Said Rea Calingasan, one of the volunteers: "I want to believe that our efforts in Kalakasan, Kalikasan helped children understand how our small actions greatly affect nature. I hope that one day, the example of at least one of our students will also be mirrored by his or her family, creating new stewards of nature."

Small steps

While members of the household don't have to share bath water to make a difference, there are other more meaningful ways that could create significant impacts to the environment:

- **Going meatless on Mondays.** Opting for a vegetarian diet for just one day might not seem like a big deal, but adding one meat-free meal per week produces a significant impact considering a large amount of greenhouse gases—mainly methane—is released when raising livestock (methane is produced as part of the animal's digestive processes as well as from their manure).

- **Slowing down.** Driving at 80 kilometers per hour uses 25 percent less fuel than 112 kph.

- **Choosing energy-efficient appliances.** When replacing old ones, choose from items bearing tags that they have been tested for the amount of electricity they could consume (like Meralco's orange tag). Also, buy compact fluorescent light bulbs or if budget allows, LED lamps since they last several times as long and use a fraction of the electricity.

- **Using your bike instead of driving all the time.** Other than walking, bicycles are the most cost-effective transportation on the planet.

- **Buying local products.** So that energy is not wasted on transportation, make an effort to grow your own food or at least buy locally produced products.

- **Reusing everything.** Change your mindset and think twice before throwing anything out. Bring a mug or reusable plastic containers to school or office. This act saves us from the accumulation of disposable plastic bottles as well as polystyrene cups.



16 JUL 2016

DATE

B-4

PAGE

UPPER HALF

✓
LOWER HALF

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

UP professor cites strong Phl potential for biogas

By DANESSA RIVERA

The Philippines has strong potential to develop the biogas industry due to the country's favorable geographical conditions and availability of various kinds of feedstock, according to industry stakeholders.

Energy generation from biogas, which is the product of natural degradation when organic matter ferments, does not cause any additional greenhouse gas emissions and does not depend on climate factors.

"The Philippines is potentially a major market for biogas given our geographical conditions and our available feedstock resources such as animal manure,

agricultural by-products and agro-industrial waste," said Liborio Cabanilla, University of the Philippines Los Baños College of Economics Management Alumni Foundation Inc. (UPLB-CEMAFI) executive director.

He said improving the country's biogas industry is just a matter of better informing the people of the possibilities.

Cabanilla said farmers have the potential to have financial security by selling agricultural waste and from the organic digestion process which also produces high-value fertilizer.

He cited, First Quezon Biogas

Corp. (FQBC) which has been producing green energy with the help of a poultry farmers' cooperative from Quezon province. Commercial poultry owners have faced problems with the huge quantity of chicken manure generated from their farms.

FQBC's biogas facility in Quezon will primarily use 14,000 metric tons of chicken manure per year from Quezon's poultry farms and rice straw, readily available in the province.

"Biogas is changing our perspective of work and our life in Quezon province giving us the chance of developing further our

main business, poultry farming while generating green energy. We solved a problem and found a lucrative venture along the way," FQBC president Andy Alquiros said.

However, the use of high-efficiency technology is important in ensuring a full control of the biological process, engineer Marcello Barbato of German biogas technology company EnviTec Biogas AG said.

"Our German experience and quality can be easily implemented in this amazing country that needs power and efficient technologies to enhance its growth," he said.