Headline: The case for PH transition to solar energy

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CAMBRIDGE, Massachusetts—If we hope to avoid the worst effects of climate change, renewable energy, especially solar power, will have to play a pivotal role in electricity production. Globally, solar technology is quickly maturing, and the price of solar panels has plummeted to the point where new and large-scale solar installations are now deemed a sound investment, and even cheaper than new coal plants. If the right policy support is adopted, with a strong political push, solar power could provide much of the electricity in the Philippines, for all purposes, including transport.

A Stanford University study pegs solar contribution at 57 percent in 2050, with the remainder to be exclusively delivered by geothermal, offshore and onshore wind, and existing hydroelectric facilities. With this transition, close to 200,000 new 35-year construction and operation jobs would be generated, translating into about P368 billion in annual earnings. In addition, 12,000 air-pollution-related deaths would be prevented per year.

For solar power to cut substantially into the Philippines' reliance on fossil fuels, major solar projects will have to be built on the rooftops of commercial, institutional and government buildings. Stanford researchers estimate using only half of our 606 square kilometers of residential rooftops and another half of our 301 square kilometers of commercial and government rooftops. Since solar panels will not take up additional undeveloped land, and the technology is not a climate gas emitter, there will be little environmental impacts. The technical challenge would be limited to ensuring the availability of the required hardware, and readying the integrity of our rooftops, which requires a structural audit.

As solar power is mainstreamed, the nontechnical challenge for the Philippines is twofold: finding enough money to support the deployment of the technology, and capacitating skilled engineers and project developers. Policy would not be a major challenge because it has been in place for some time. The strategic challenge is mustering the political will to put the support policy in practice while efficiently adapting it to evolving situations. This would greatly reduce investment uncertainties and risks, thus driving the Philippine renewable energy market forward.

A change in energy politics entails a creative change in current political mindsets. This change would underline the economic plausibility, the business opportunities, and the promise of job generation that the Philippines' transition to solar energy would occasion. At the same time, this change would resolve the conflicts that the transition would create, especially with the current energy regime that is heavily invested in dirty fossil fuels, coal in particular.

Staying on the coal track—the option that the current administration heavily supports—causes runaway global warming, the impacts of which have been hitting the Philippines the most. Our personal and emotional experiences of the impacts of weird weather are etched in our collective memory as a nation. Recent stronger typhoons and protracted dry seasons, to name just two, should have pushed us to collectively assert an effective response to the human causes of climate change, in addition to finding ways to become more resilient against future impacts.

Indeed, we could have used those moments as "opportunities" to do what is morally right, and that means addressing climate change at its root causes. No new coal plants should have been approved. A review of existing ones should have begun in earnest. And rapid transformations in the

resources and systems of electricity production should have been undertaken.

The Philippines is abundantly blessed with naturally occurring, perpetually available, and environmentally benign sources of renewable energy. Our geographic location puts us in an enviable spot to easily and efficiently tap these resources, solar in particular, almost year round. If Germany and Scotland, with relatively less solar radiation, were able to harvest their solar potential and produce electricity solely from the sun, there is no compelling reason why the Philippines can't.

There is now a market for Philippine renewables. But the full support of the strongest political will matched with equally formidable civil-society or private-sector cooperation remains absent. Under current circumstances, solar power will have a tough time competing with new coal plants. But this does not have to be the case. With our favorable geography, our innovative government policies, and our businesses ready to harvest the benefits of clean energy investments, we can easily chart a path where our electricity could be generated largely from renewables.

The truth, however, is that this path is costly, and decarbonizing our current energy supply involves making tough choices. The first and most important of these involves politics. It entails, foremost, making policy statements that deliver the strong message to change the ways we produce energy. One transformative statement to make is an economy-wide energy transition that would see a Philippines powered 100 percent by renewable energy systems by 2050. This statement may sound simplistic. But the image it conveys is ambitious and visionary, exemplifies change, and sends a number of positive messages to the domestic renewable energy market.

It also delivers an important message to the international community: that despite our very little emission profile, and very little contribution to global warming, we still want a future that puts premium on reduced harm and hardship for Filipinos.

Laurence Delina, of Boston University and Harvard University, is an OFW from South Cotabato. His latest book is "Strategies for Rapid Climate Mitigation."