



The Trike That Reduced Air and Noise Pollution While Improving A Local Economy

ADOMANI® Helps Boracay Island Improve Quality of Life.

A Case for Cleaner Air in the Philippines

Air Pollution knows no boundaries, even if you are a small island in the South China Sea. Boracay, a tourist Island home to top resorts, located in the Philippines is no stranger to pollution. In 2018, the beaches were closed due to an influx of trash pollution along the coastline where tourists congregate. The temporary closure placed an economic hardship on the 36,000 employees that depend on tourism to earn their living.

Additionally, air pollution caused by the hundreds of internal combustion engines on the island; specifically, gas-powered trikes, three-wheeled motorcrafts that transport tourists around the island is another health and economic problem the island faces. The Philippines already has some of the worst global pollution and is amongst the top three countries for pollution related deaths. With 80% of soot-producing pollution shrouding the Manila area, there are 3.5 million gas powered trikes throughout the country that contribute to the poor air quality.

A Polluted Island Stifles Tourism and Local Economy

The tiny island of Boracay was facing a pollution challenge affecting tourism and every local business that catered to tourists. On one front, beaches were being polluted with refuse causing local authorities to close the beaches resulting in a loss of income for businesses along the island's coast. Additionally, air and noise pollution were also causing bigger problems for local tourists.

Tourists complained to city officials that the noise level of the gas-powered three-wheeled taxi vehicles (trikes) and the smell of gasoline was disruptive to their relaxing on the beaches and affecting their time spent at hotels and restaurants. Faced with the possibility of an economic slowdown on the island and reduction of income from tourists, officials had to solve their pollution problem to help local businesses stay afloat and to continue to attract tourists to the island.

Improving Tourism and Air Quality with E-Trikes

ADOMANI was approached by GerWeiss EV, a provider of electric trikes based in Manila, Philippines, asking for ADOMANI's expertise in the development of

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Boracay Island, Philippines

- Island Size: Approx. 4 square miles
- Population: 32,236
- Annual Tourism: 1.5M

Problem

Noise, trash, and air pollution became hazardous to local residents and tourists.

Solution

Help reduce noise and air pollution through use of electric trikes.

Results

Improved overall air and noise pollution while increasing driver earnings by at least 54%.

a solution for the island's transportation pollution problem. The ADOMANI EV team traveled to the Philippines to meet with local taxi providers, government officials, and regulators to discuss the potential of moving their operations from the soot-producing fossil-fuel engines to an all-electric vehicle that reduced toxic air and noise pollution while helping local drivers earn more money, thus positively impacting the overall local economy.

After a few months of working through vehicle concepts and operations, ADOMANI and their local partner, GerWeiss, developed a solution for the islands, the all-electric e-trike. The new e-trike would provide zero-emissions and noise for taxi drivers as they operated in and around tourist areas of the island. The e-trikes can be charged daily and the operator can run 10-12 hours per day depending on passenger capacity. If the driver requires additional charging, they simply drive their e-trike to a service center on the island and swap out the battery at a fraction of the cost of what they were paying for fuel.

ADOMANI Impacts Local Economy and Air Quality

The e-trikes Powered by ADOMANI are fairly new to the island of Boracay. ADOMANI initially received an order for 250 e-trikes and GerWeiss has recently delivered 10 e-trikes as their proof of concepts, with an additional 50 in production and a 60-day delivery time frame. The e-trikes are already having an impact for local drivers. Operating an internal combustion engine trike can cost a driver \$6-\$8 per day in fuel, leaving him very little at the end of the day for pay. The e-trike costs about \$1 per day to charge, allowing the operator to earn anywhere from \$12 to \$20 per day. Drivers on average earn about \$253 per month in the Philippines, with the e-trike, their earning potential increases also increasing their living standards, thus putting more money into the local economy.

The impact on pollution, both toxic air and noise, are also expected to significantly be reduced over the coming months, especially as more e-trikes roll out across the island and as tourists begin to turn their sights to vacationing on the island. The overall impact the powered by ADOMANI e-tricks have are two-fold, they help reduce toxic pollution and help boost the local economy. Once the e-trike program is in full-swing, ADOMANI looks to help create the next challenge facing the island and mainland Philippines by developing the all-electric jeepney; currently a soot-producing bus-type vehicle that transports many more passengers than the e-trike across the country and throughout cities.

The ADOMANI Advantage

ADOMANI is dedicated to helping communities, fleet owners, and small businesses gain access to all-electric vehicles that help them meet their environmental impact requirements while helping government agencies and private businesses save on the total cost of ownership. ADOMANI purpose-built all-electric, zero-emission trucks and vans. Working with ADOMANI gives firms access to a team of experts in sales and marketing of commercial trucks, buses, and vehicles that are specifically designed for the electric vehicle market. With decades of combined expertise, ADOMANI's team can help you solve your electric transportation needs.

“Drivers earning potential increases also increasing their living standards.”



The powered by ADOMANI e-Trikes being assembled in the Philippines.



All-electric, zero-emission e-trikes powered by ADOMANI during their test run in Manila, Philippines.

To learn how powered by ADOMANI zero-emission vehicles can help your business visit us at www.AdomaniElectric.com or call: **951.407.9860**

