

Applying iLotusLand Platform to Monitor 163 Stations in Collaboration with Quang Ninh Authority



TIME
2019



LOCATION
Quang Ninh province - VietNam



CLIENT
DONRE Quang Ninh Province

ABOUT THE CLIENT

Nestled in northeastern Vietnam, Quang Ninh province is defined by its bustling industrial operations and accompanying environmental challenges. With a population of approximately 1.2 million, the province stands as a key player in Vietnam's economic landscape. Its coal mining industry, boasting reserves exceeding 6 billion tons, yields around 50 million tons annually, vital for the nation's energy needs. However, this prosperity comes at a cost, as evidenced by concerns like deforestation, soil erosion, air and water pollution.



THE CHALLENGE

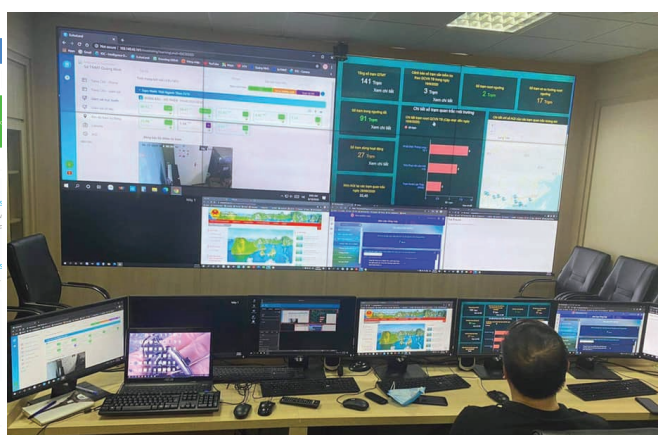
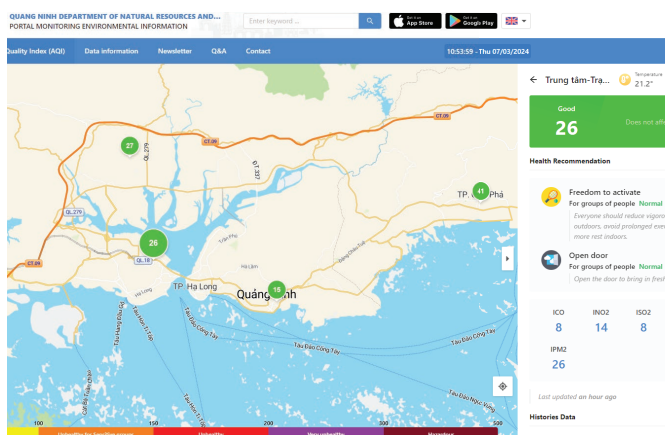
Quang Ninh province grapples with multifaceted challenges in environmental protection, especially concerning industrial wastewater, stack emissions, groundwater, surface water, and ambient air quality. The province's industrial activities, particularly coal mining and manufacturing, generate substantial volumes of wastewater laden with pollutants, endangering surface water quality. Stack emissions from factories and power plants contribute to air pollution, impacting ambient air quality and public health. Moreover, unregulated extraction practices and industrial activities pose risks of surface water contamination, threatening the region's water resources.



THE SOLUTION

In response to the environmental monitoring mandate set by Quang Ninh province's regulatory authority, the iLotusLand platform for Environment (On-Premise) was being offered. Designed for data security, it's installed on the customer's server, ensuring compliance with regulations. iLotusLand platform enables real-time monitoring of critical parameters by 6 main features including Data Connection, Camera Connection, Report generation, Remote Control, Billing, and Digital Communication. This empowers the authority remote management from 163 stations from industries and their own-invested ones. Providing Quang Ninh province with robust environmental oversight, facilitating efficient monitoring, and enhancing compliance across industrial operations. Moreover, by iLotusLand for Web Portal, now the local people can access to the AQI (Air Quality Index) freely to see the conditions surrounding their living.

Application	Wastewater	CEMS	AAQMS	Coastal Water	Surface Water	Hydrometeorology	Groundwater
Number of stations	84	43	16	7	8	4	1
Measured parameters	Fe, Mn, Flow, Amoni, COD, pH, TSS, Temp, Clo	Flow, Temp, Dust, CO, NO, SO2, O2, NOx, Pressure	PM10, PM 2.5, Rain, Temp, Wind Direction, Wind Speed, NO, NOx, O3, SO2, NO2, CO, SP, PM1	Crom6, TOC, CN, Oxy, TSS, pH, Temp, Flo, COD	TSS, pH, Oxy, Temp, Flow	Wind Direction, Wind Speed, Wave	Flow, Level, Temp
Software model	iLotusLand Platform for Environment (On-Premise) & iLotusLand for Web Portal						



THE RESULT

“By the iLotusLand platform, it helps us to centralize all the data and better control the discharge of industries to grow sustainably”
Mr. Thanh Dinh, Deputy Director

The installation of iLotusLand Platform for Environment (On-Premise) & iLotusLand for Web Public marks a significant advancement in promoting environmental sustainability within Quang Ninh province. This initiative provides the local authority valuable insights into 36 stations of Water Quality, and AAQMS, Hydrometeorology, at the same time bringing the needed control over the industry's discharge, 127 stations of CEMS and Waste Water. Then aiding prompt responses to environmental threats. The information collected will not just improve initiatives aimed at preserving the environment but also assist in crafting policies grounded in evidence, promoting a healthier and more sustainable ecosystem and enhancing the well-being of the community in Quang Ninh.

“ iLotusLand is an environmental IoT company offering data-driven environmental monitoring solutions for better decision-making. With our plug-and-play stations, we monitor a wide range of parameters in Wastewater, Surface Water, Groundwater, Drinking Water, CEMS, AAQMS, etc. And iLotusLand data analytics platform delivers actionable insights for government, industries, and communities. Our commitment is to be a key player in fostering a sustainable future through intelligent environmental monitoring solutions and data science. ”