

Nam Dinh DRONE Leveraged iLotusLand Platform To Monitor 34 Stations Remotely



TIME
2023



Location
Nam Dinh province - VietNam



CLIENT
DONRE Nam Dinh Province

ABOUT THE CLIENT

Nam Dinh, a coastal province in northern Vietnam, spans approximately 1,650 square kilometers. It is endowed with rich natural resources, including fertile soil ideal for rice and aquaculture, particularly in the Red River Delta. The province actively focuses on environmental protection, with initiatives to reduce pollution in its numerous small industries and improve waste management. Nam Dinh also invests in maintaining its 74 km coastline, combating erosion and promoting sustainable fishing practices to preserve marine biodiversity.



THE CHALLENGE

Nam Dinh, with its 34 environmental monitoring stations, faces challenges in efficiently managing and integrating data due to the lack of centralized remote monitoring software. This absence hinders timely data analysis and response to environmental issues, complicating the enforcement of regulations and pollution control. Without centralized software, data remains siloed, reducing the effectiveness of decision-making and coordination among various environmental protection agencies. Implementing a unified monitoring system is crucial for proactive environmental management and enhancing the province's ability to safeguard its natural resources.



THE SOLUTION

Our iLotusLand platform for Environment On Premise integrates data from Nam Dinh's 34 environmental stations into a centralized dashboard, facilitating real-time analysis and decision-making. This system offers on-premise data storage for security purpose, customizable alerts, automated reporting, and advanced analytics, improving management efficiency and compliance tracking. By adopting our platform, Nam Dinh can enhance responsiveness and oversight, ensuring effective protection and sustainability of its natural resources, all through a streamlined, user-friendly interface.

Application	AAQMS	CEMS	Surface Water	Waste Water	Ground Water
Number of stations	5	6	5	8	10
Measured parameters	Pressure, Radiation, CO, Wind Direct, Wind Speed, Rain, PM1, O3, NO2, PM10, PM2.5, Humidity, SO2, Temp, NOx	CO, Flow, NOx, O2, PM, Pressure, SO2, Temp	CO, Flow, NOx, O2, PM, Pressure, SO2, Temp	COD, Color, Flow, Amoni, TSS, Temp, pH, TDS	Flow, Level
Instrument models	Envea: - Cairnet + Cairsense - AF22e - AC32e - CO12e - O342 - MP101M + OPM Lufft: WS700	Others			
Datalogger model	<u>Envidata 1801</u>				
Software model	<u>iLotusLand Platform for Environment (On-Premise)</u>				



“The function of Document Storage helps our team quite a lot in storing documents digitally instead of physically. By that, we can find out all of the related documents easily and quickly as they are all centralized in one place”
 – Mr. Trung Do, Operation Team

Following the installation of the remote centralized monitoring platform in Nam Dinh, the results have been transformative. The platform enabled real-time data analysis and quicker responses to environmental issues, leading to enhanced regulatory compliance and better pollution control. Improved inter-agency coordination and more effective resource allocation were also noted, boosting overall environmental management. This increased transparency and public engagement, substantially elevating the province's capacity for sustainable environmental stewardship.

“ 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. ”