esri Indonesia

Smarter permit system with location

At PT Pertamina (Persero), Indonesia's energy giant, managing thousands of permit documents manually slowed operations, increasing compliance risk and driving avoidable costs.

The challenge

Pertamina oversees thousands of operational permits across its subholdings, from exploration and production permits to land use rights and retail distribution. Manual processes made tracking these permits slow and error prone. Data was fragmented, monitoring delayed, and the risk of expired permits exposed the company to potential fines. For a national energy leader, this inefficiency threatened both operational performance and corporate governance.

The solution

In partnership with Esri Indonesia, Pertamina built SYNERGY, a digital permit system providing real-time visibility of more than 5,000 permits in one view.

By integrating location intelligence, SYNERGY adds spatial context to each permit, improving visibility and risk management. The initial rollout at PT Pertamina Patra Niaga covered 322 strategic permits, enabled by:

- **Dynamic dashboards:** Spatial view of permit location and status.
- **Search chatbot:** Instant document access across teams.
- **Early warning system:** Proactive alerts before permits expiry.

This streamlined management and improved accuracy at scale.

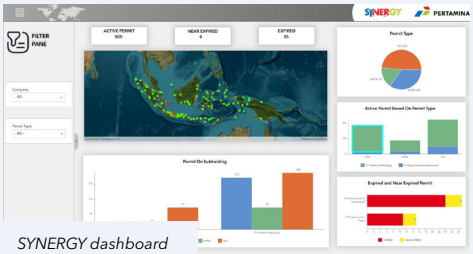
What's next

The success sets the foundation for rollout across all Pertamina subholdings. Beyond cost savings and operational efficiency, it demonstrates how geospatial technology strengthens governance and transparency through real-time spatial visibility. Through this innovation, Pertamina will continue to support secure, resilient, and sustainable energy.

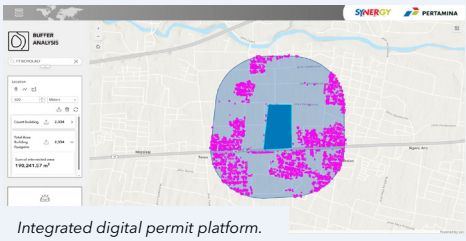
The outcomes

The SYNERGY platform delivered immediate, measurable impact at PT Pertamina Patra Niaga:

- **USD 25 million in cost savings**, including from avoided fines and operational rework.
- **Improved accuracy** in tracking and monitoring permit documents.
- **Stronger governance** through a centralized ArcGIS-powered system with real-time spatial insight.



SYNERGY dashboard



Integrated digital permit platform.

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