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Atoms for Peace

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Strengthening the national environmental monitoring system in the marine ecosystem in Guatemala

The challenge...

The Guatemalan marine environment, especially around Puerto Quetzal and other areas on the south coast, is experiencing the effect of an increase in population and power generated industries.

Puerto Quetzal is the most important industrial harbour of the Central American Pacific coast. Despite its leading position and modern functioning, this national company had no environmental monitoring programme.

The project...

The project helped to determine the levels of contamination of ecotoxic metals in the marine environment and complemented the National Directorate of Energy's evaluation of radioactive contaminants.

Capacity building and acquisition of new expertise have allowed Puerto Quetzal to establish its own environmental department, equipped with oceanographic and nuclear detection equipment to reconstruct past and monitor future pollution possibly occurring in the harbour's area of influence. With the support of harbour authorities and government officials, the project has led to better coastal marine management.



Sugar terminal, Puerto Quetzal

The impact...

- National expertise and capacity in environmental quality assessment and pollution monitoring strategies have improved.
- The expertise gained will allow the implementation of an environmental monitoring system at Puerto Quetzal, a prerequisite to apply for ISO14001 certification.
- There is possibility to develop predictive impact assessment related to coastal planning.
- Multilateral collaboration between Empresa Portuaria Quetzal and other national institutions (Ministry of Environment, Ministry of Energy and Mines and Universities) has been enhanced.



New low energy gamma spectrometer