

CITIES AND INFRASTRUCTURE



A. Smart Street Lighting

Technology Description

High efficiency **LED street lights** are installed in cities.

An **ICT Communication platform** collects data from LED streetlights and sends data (via cloud) to decision-makers

A **control system enables real-time on/off controls**, dimming, and failure reporting of city-wide LED lighting networks to **enhance energy savings**.



B. Waste Monitoring Solution to Reduce Emissions

Technology Description

This **waste monitoring solution** uses **autonomous wireless sensors** track **waste bin fill levels** and status in real time, and that data is sent to waste management authorities. With this, cities can replace fixed waste collection scheduling with data-driven planning.

This helps to reduce unnecessary truck trips (and **emissions**), prevent waste overflow for community well-being, and support more efficient waste management.

The monitoring solution can be integrated into waste management software and fleet management systems to centralize operational data.



C. Early Warning Systems for Climate Disasters – “AI Nose” Fire Detection



Technology Description

“AI Nose” sensors are strategically placed around cities or communities. The “AI nose” detects wildfire smoke.

Data is sent to emergency services to notify communities at risk.

The “AI Nose” **detects wildfires in minutes, not hours.**


Protects communities, livelihoods, health, and infrastructure



D. Early Warning Systems for Disasters

Technology Description

This early warning system technology provides **near real-time, AI-enhanced hazard information** for 28 natural, man-made, and biological hazard types. Customizable Smart Alerts to protect your stationary and moving assets.



Asset protection and supply chain risk management

- MONITOR YOUR PHYSICAL AND MOVING ASSETS**
Monitor your physical and moving assets that may be exposed to hazards by integrating your data securely through our API.
- CREATE CUSTOM ASSET ALERTING THRESHOLDS**
Utilize our Smart Alert feature to receive early warning notifications when one or more of your assets are in harms way.
- GET QUICK ASSET EXPOSURE REPORTS**
Utilize your reporting tool to estimate the capital exposure value and to quantify potential impacts of hazards to your most important assets.
- LOCATE SAFE SITES FOR YOUR ASSETS**
Leverage PDC's arsenal of historical hazard information and other data to locate low-risk sites for your assets.