

AngmarTek: Smart Energy Resilience for Tribal Nations

Team

Overview: AngmarTek is a hard-tech energy startup based in Washington State, specializing in developing and implementing innovative technologies like advanced air quality monitoring systems.

Mission: To enhance environmental sustainability and operational efficiency in building management while empowering tribal communities to tackle environmental challenges.

Problem: Post-COVID-19, it has become industry standard to have air filtration systems in buildings, but the lack of adaptive control over these systems results in significant energy inefficiencies and waste.

Solution: AngmarTek introduces a smart air quality monitoring system that adjusts HVAC operations dynamically, based on real-time occupancy and air quality data to optimize energy use and enhance indoor air conditions.

Prototype air quality monitoring system



Dr. Sep Makhsous
Expert in technology commercialization and entrepreneurship education, with a strong background in startup development and support.



Aaron Zielinski
Expert in startup support, technical writing, and project management, with a strong background in funding acquisition, technical writing, and research dissemination.



Maxwell Mamishev
Expert in social media, broader outreach, and marketing. He has patents and publications on topics like COVID-19 and the importance of social distancing.



Partners & Collaborators

UW Industrial Assessment Center



Center Director: Prof. Alexander Mamishev is an expert in sustainable sensor design and energy technology. Won the 2024 Husky Award in recognition of sustainability efforts in tribal communities.

Fiji Girl Guides Association



Previous collaborations in Fiji led to measurable improvements in air quality and energy efficiency, demonstrating ability to work closely with community stakeholders to achieve mutually beneficial outcomes.