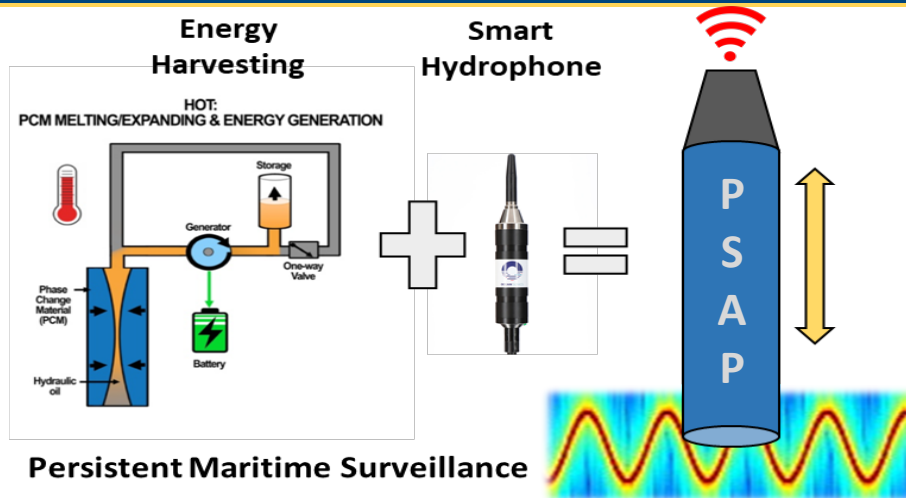


# Persistent Smart Acoustic Profiler (PSAP)



## Persistent Maritime Surveillance

Integrating advanced technologies to better support today's warfighter needs with smart unmanned systems

## Problem Statement

- **The Objective:** Combine groundbreaking technologies to develop easily-deployed, unmanned acoustic sensing platforms that can autonomously provide persistent surveillance of the maritime battlespace in support of the Navy's Intelligent Autonomous Systems (IAS) Strategy
- **The Approach:** Work collaboratively with industry and research partners to integrate novel technologies into a state-of-the-art solution that provides today's warfighter intelligent information about the maritime battlespace, enabling more timely, informed, and precise decision making.

## Impact

- Unique energy harvesting process supports unlimited endurance, reduces surface footprint
- Smart processing gets essential information more quickly to the operator in near real time
- Reconfigurable while deployed optimizing system performance based on environmental conditions
- Robust performance - field-tested in real ocean environment, fundamental operational modes thoroughly checked and documented

## Transition

PSAP capability can be adapted to supporting a myriad of operational and research requirements

- **Operational Missions:** USW, ISR, METOC Battlespace Awareness
- **Research Applications:** Underwater acoustic studies, ambient noise studies, soundscape monitoring, behavioral response studies, ecological studies, marine mammal research

Potential continued support: UWDC, ONR-OA, ONR-MMB, N45-LMR, NOAA-Oc Exp

Potential collaboration: Navy Labs, MM Research