



Innovative Technology Fund

Maryland's Chesapeake & Coastal Service

Restoring the Chesapeake Bay through Innovation

The Innovative Technology Fund was established with the goal of accelerating Bay restoration through the development of new technologies. At the 2007 Chesapeake Bay Program Executive Council (EC) meeting, the State of Maryland and the Environmental Protection Agency (EPA) agreed to promote investments in technologies that could accelerate Bay restoration efforts.

The Innovative Technology Fund is made possible through funding from Maryland's Chesapeake and Atlantic Coastal Bays Trust Fund and the Environmental Protection Agency (EPA) in partnership with the University of Maryland's Industrial Partnership (MIPS) and the Mtech Ventures Chesapeake Bay Seed Capital Program (Mtech).



Photo courtesy of Blue Wing Environmental Solutions and Technologies, LLC

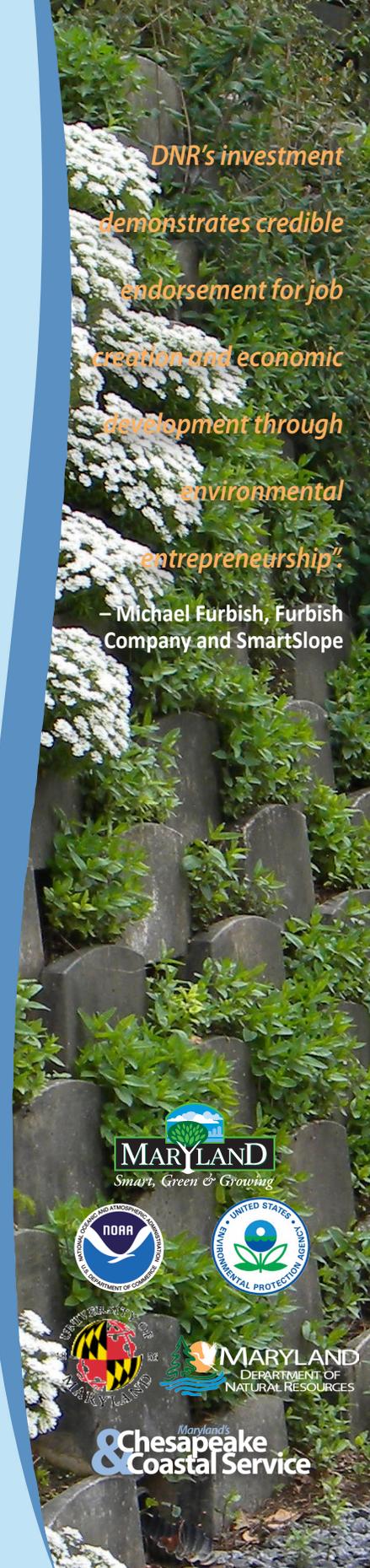
Innovation in Action

A number of projects have been supported under the Innovative Technology Fund:

- **AH Pharma, LLC** is refining a radiant floor heat technology in chicken houses that decreases ammonia emissions by reducing litter moisture.
- **AviHome, LLC** has developed a new plenum flooring system for poultry houses that substantially reduces the environmental impact of poultry production while also improving bird health and performance.
- **Beacon Research, Inc.** is providing detailed and comprehensive performance information for the use of a geosynthetic insert to filter stormwater runoff.
- **Blackrock Algae, LLC** is testing new biofouling screen systems that remove harmful nutrients and sediment from aquatic ecosystems such as the Chesapeake Bay.
- **Blue Wing Environmental Solutions and Technologies, LLC** is evaluating floating treatment wetlands for the removal of nitrogen and phosphorus in poultry waste lagoons.
- **HY-TEK Bio, LLC** optimizing technology to sequester CO2 and additional harmful nutrients from flue gas produced from burning fossil fuels using enhanced micro algal growth, simultaneously creating clean energy from fossil fuels.

DNR's investment demonstrates credible endorsement for job creation and economic development through environmental entrepreneurship!

– Michael Furbish, Furbish Company and SmartSlope



Coastal Zone

Counties:

Anne Arundel

Baltimore

Calvert

Caroline

Charles

Cecil

Dorchester

Harford

Kent

Prince George's

Queen Anne's

Somerset

St. Mary's

Talbot

Wicomico

Worcester

and

Baltimore City

- **Maryland Environmental Plastics, LLC** has invented biodegradable plastic seed pots uniquely designed to allow for proper root growth for greater plant establishment and restoration in the Chesapeake Bay.
- **NutriGrown, LLC** is formulating soil additive products that reduce nitrate leaching and nutrient runoff through slower, more consistent nutrient release.
- **Proparts, LLC** proposed wind turbine technology that produces zero emissions reducing greenhouse gases by decreasing household electrical demand on coal fired power plants.
- **Shore Thing Shellfish, LLC** is testing the operational effectiveness of 'in-situ' oyster setting to increase spat survivability, while reducing labor and cost.
- **Smart Slope, LLC** produces and sells concrete retaining wall modules designed to be planted, creating fully vegetated walls helping to diminish heat island effects, as well as reducing stormwater, sediment and nutrient runoff. They are also developing an extensive green roof substrate with recycled and waste materials, producing a sustainable substrate.
- **Stancills, Inc.** has developed a light weight low carbon footprint green roof planting media with improved physical properties that will increase the success and implementation of green roofs.



Photo courtesy of AHPharma, LLC.

Who is Eligible?

Research and Development:
Students, faculty and staff from the University of Maryland System

Seed Capital Fund:
Any Maryland Company

Award Details

Research and Development:
\$30,000-\$90,000

Seed Capital Fund:
\$50,000-\$150,000

For More Information

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