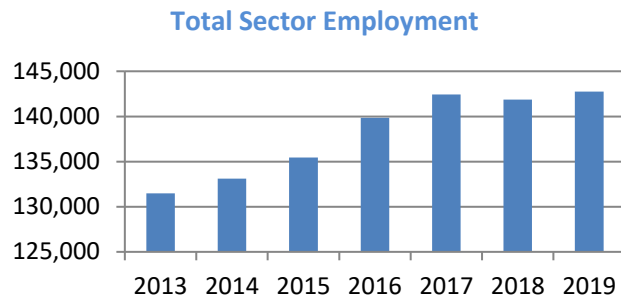
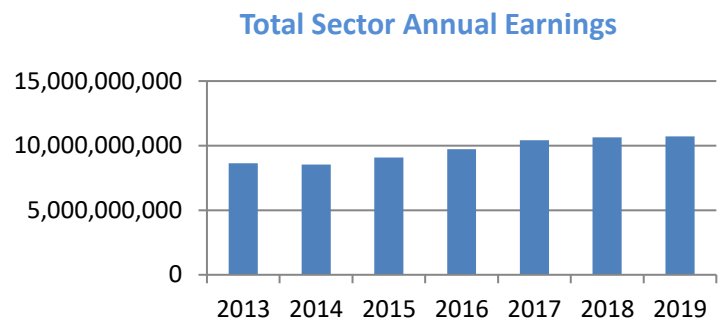


## Advanced Energy Impact on Maryland

As a result of direct investment by the state to Since 2013 Maryland has benefitted from growth in Jobs & Wages in the Energy Sector



US Bureau of Labor Statistics data shows more than 141,000 energy sector jobs in the state, an increase of 11,284 from 2013 to 2019.



The collective annual earnings of all workers in the sector increased from over \$8.6B in 2013 to \$10.7B in 2019; a \$2B increase for the period.

## Maryland Clean Energy Center (MCEC) Impact on Advanced Energy Industry

Since 2010, MCEC has leveraged more than \$75M in private capital for energy project financing, for every state dollar invested MCEC has achieved a 19 to 1 ROI.

- MCAP/ Maryland Clean Energy Capital Program facilitated over \$38 million in cost effective financing for energy efficiency improvement upgrades at state institutions; including: the University of Maryland College Park, UMBC, Coppin State, and the Institute for Bioscience and Biotechnology Research at Shady Grove. MCEC is currently working with Baltimore City Public Schools and Morgan State University.
- MHELP/ Maryland Home Energy Loan Program provided access to over \$30M in low-cost loans to over 4,000 homeowners to improve the energy efficiency of their home with new HVAC systems and weatherization measures, and work for over 1600 contractors.
- MD-PACE program enabled over \$6M to date in convenient Property Assessed Clean Energy (PACE) financing for commercial property owners in 15 jurisdictions across the state.
- Launched MEIA, an innovative technology accelerator to move clean energy technology developed in Maryland university labs to the marketplace.
- Annually hosts the Maryland Clean Energy Summit, a unique statewide energy conference, which connects numerous innovative clean energy businesses across the country with project development opportunities and partners in Maryland
- Partnered with DGS to support energy efficiency for state buildings, and with DNR to assist with development of biomass energy projects.
- Serves as an information resource for industry on energy policy and regulation in Maryland



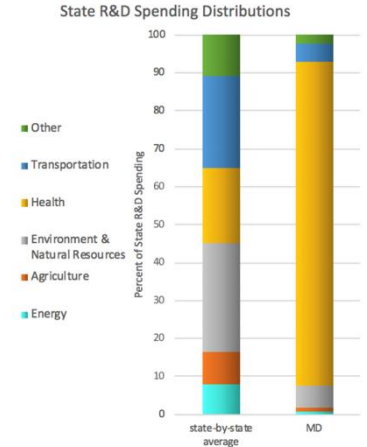
## Maryland Energy Innovation Institute (MEI<sup>2</sup>) Impact on Advanced Energy Innovation

Maryland is first in the nation in energy innovation awards from the US DOE ARPA-E, but is last in the nation in state support for the commercialization of those technologies.

- Maryland disproportionately spends 85% of its state support on health innovation and less than 1 % on energy.
- MEI<sup>2</sup> is the only state entity focused on energy innovation, providing seed funding and technical assistance to support commercialization of advanced energy technologies created in the state.

Since creation in 2017, MEI<sup>2</sup> has leveraged its state funding to obtain more than a 20 to 1 ROI.

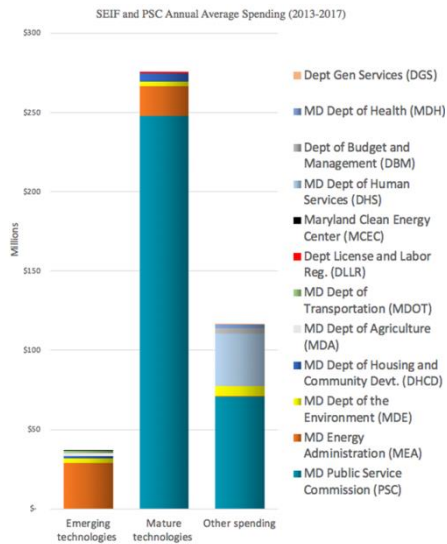
- Federal research grants awarded to UMCP alone for the past three years amounted to \$40 M in revenue to the state economy, a greater than 20.1 ROI compared to the state investment in MEI<sup>2</sup> for the same period.



## Maryland Should Prioritize & Continue Investment in Advanced Energy

Target more than 1% of available resources to support innovation & leverage strategy to attract a greater share of private capital to achieve desired outcomes.

Favorable Report requested for HB 1426/ SB 739 to:



activities through MEI<sup>2</sup> and MCEC.

- Broaden the definition of clean energy to include advanced energy and grid modernization technologies to include:

- Energy storage, Grid modernization and Demand Reduction
- Bio-tech in Clean Energy and Clean Agriculture
- Carbon dioxide removal, management and re-use
- Clean Fuels and Displacement of Energy-intensive products
- Mobility – EVs, vehicle automation, transportation systems
- Integrated systems – AI and ‘internet of things’
- New concepts in Nuclear Power to improve safety and lower costs

- Clarify the capability of MCEC to finance energy measures on state facilities

- Provide a predictable, stable and ongoing commitment of \$2.1 M to fund energy technology research and development