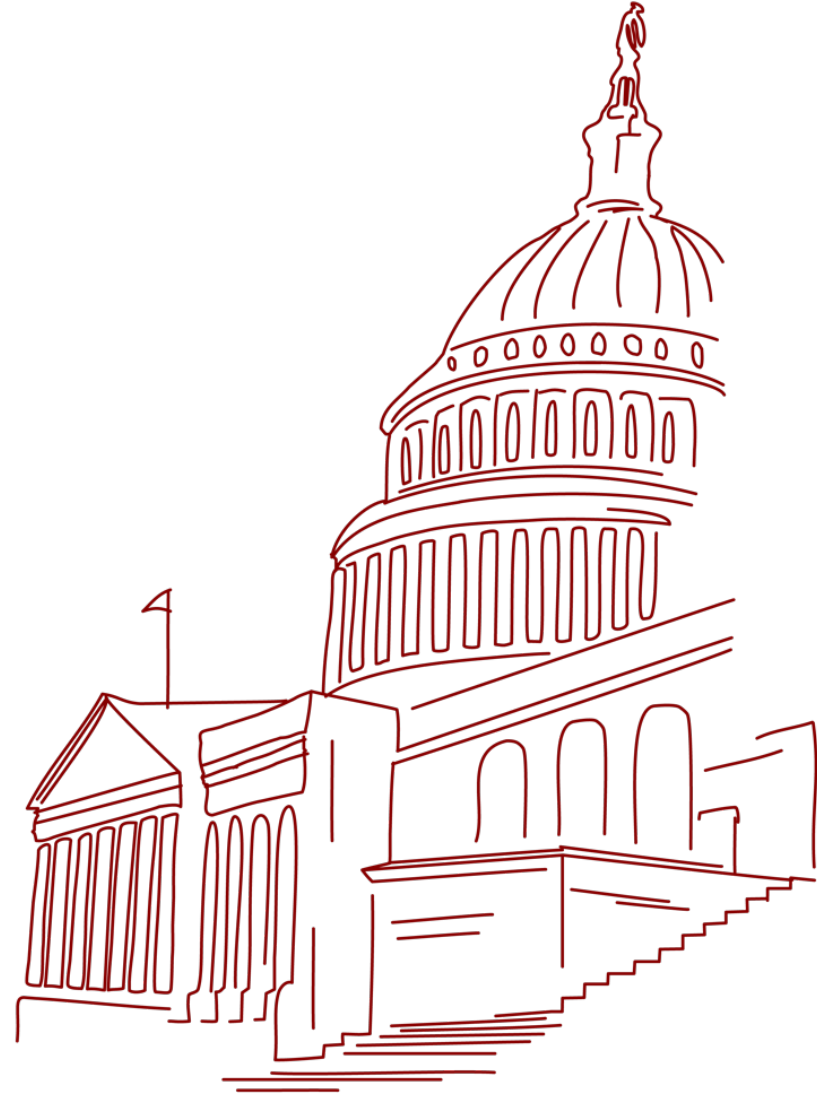




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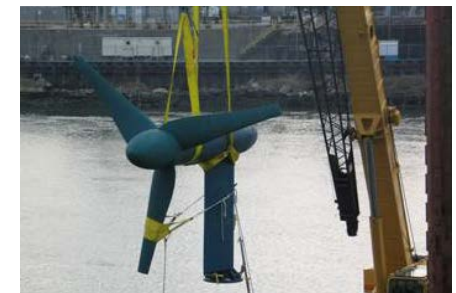
SMI Lobbying/Federal Marketing Activity

- Marine Renewable Energy Promotion Act
 - Introduced by Sen. Wyden (D-OR) and Murkowski (R-AK)
 - New Guidance to the DOE Water Power Program; Authorizes Funding at \$50M Per Year; Provides Regulatory Efficiencies.
- FY15 Water Power (MHK) Appropriations – Successfully lobbied to increase the program by \$9 million in House bill. \$41.3 million for MHK in Senate bill - \$11 million above DOE request
- FY15 Navy - \$25 million for MHK R&D in Senate bill
- SMI has lobbied for over \$220 million for MHK R&D since 2002

U.S. MHK Projects

Recent Progress

- U.S. Navy/Marine Corps WETS Hawaii - Full-scale devices to be connected to new and existing berths in Kaneohe Bay.
 - MHK helps meet DoD requirement to secure 25% of power needs from renewable sources by 2025 as required in the FY07 Defense Authorization Act. Navy goals are 50% by 2020. Supported by DOE funding and Univ. of Hawaii/HINMREC.
- NNMREC (Oregon St. Univ, Univ. of Washington, and Univ. of Alaska-Fairbanks) recently funded to lead wave energy research and support development of the Pacific Marine Energy Center
- SNMREC (Florida Atlantic Univ.) recently secured permits for offshore ocean current technology testing
- Verdant Power - FERC license to build out its tidal energy project in New York City.
 - Verdant Power is expected to install 30 tidal turbines in the East River to generate 1 MW of electricity.



U.S./U.K. Wave & Tidal Energy Support

U.S. Government Support



- No national RE target
- No set government target for MHK installation – only old industry goal of 15-23GW by 2030
- DOE FY15 budget request– \$39.5M for MHK RD&D
- One 3 berth, grid-connected wave energy test site, no WECS tested since 2010.
- Ad-hoc permitting regime/onerous environmental studies
- Tax credits lack parity with other renewables
- National test centers established, not yet commissioned

U.K. Government Support



- Country-wide RE target of 15% by 2020
- Government target to install 2.17GW by 2020
- £155M announced for R&D - 2013
- Recent projects - installed capacity of 2.6MW wave and 3.4MW tidal projects
- Streamlined regulatory & licensing framework
- Revenue Support Security (ROCS); Renewable Energy Feed-In Tariffs
- Three functioning test centers

Total Investments

£ € \$

Total European Investment:



U.K. £515M
(~\$782M)

Europe €153M
(~\$197M)

Total: \$979 million*

*approximate total over 10 years

Total U.S. Investment:



DOE \$203M

DOD \$69M

Total: \$272 million*

*approximate total over 10 years

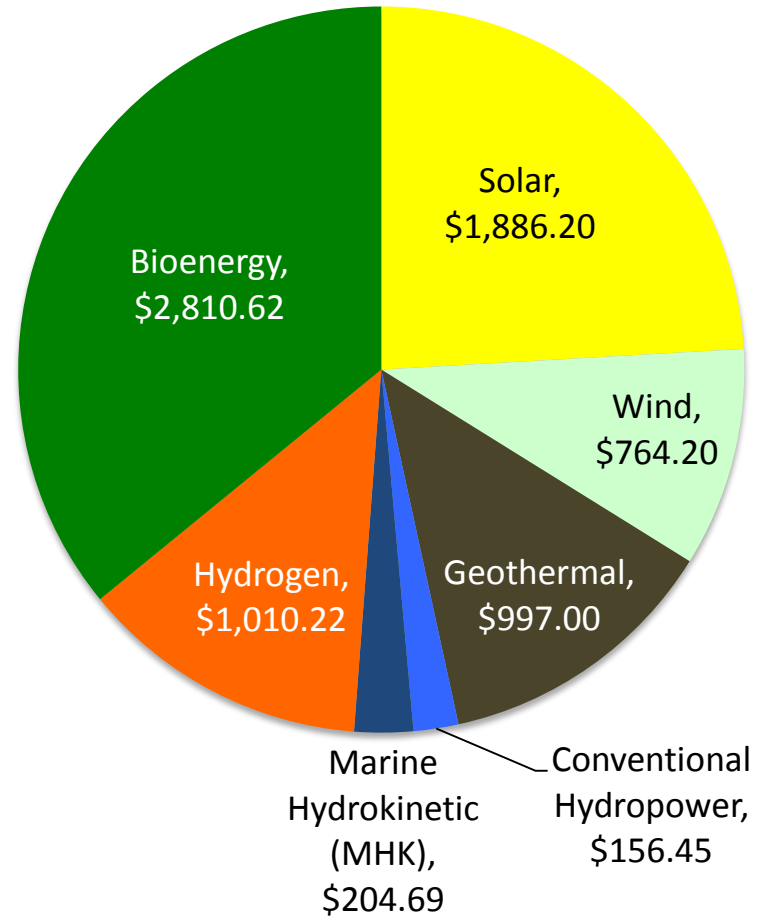
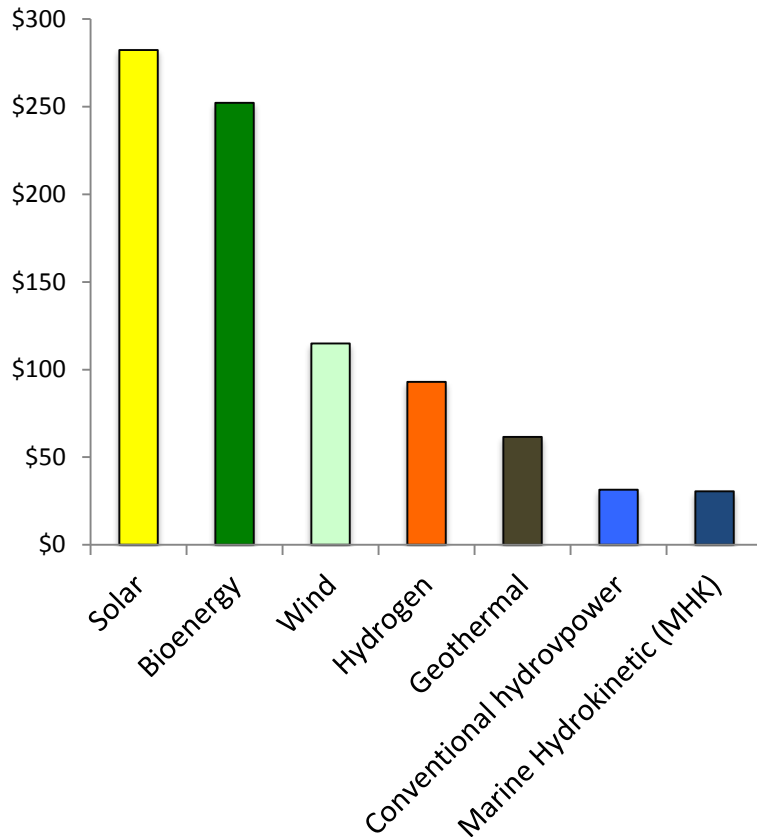
DOE Update

- FY14 funds mostly awarded
- FY15 planning on hold until Congress appropriates funding
- Big focus on clean tech manufacturing, sustaining/growing mature RE sectors
- Offshore wind budget stable, but will need industry advocacy in the new Congress
- DOE reported that the U.S. could get 25% of its power from MHK by 2050
- However, marine energy budget requests declining – Considered “Off Roadmap” niche technology
- “Materiality” key to securing support - can any new technology reduce carbon emissions within 10 years?

Total DOE Renewable Energy R&D Funding FY 08-14, \$7.829 Billion*

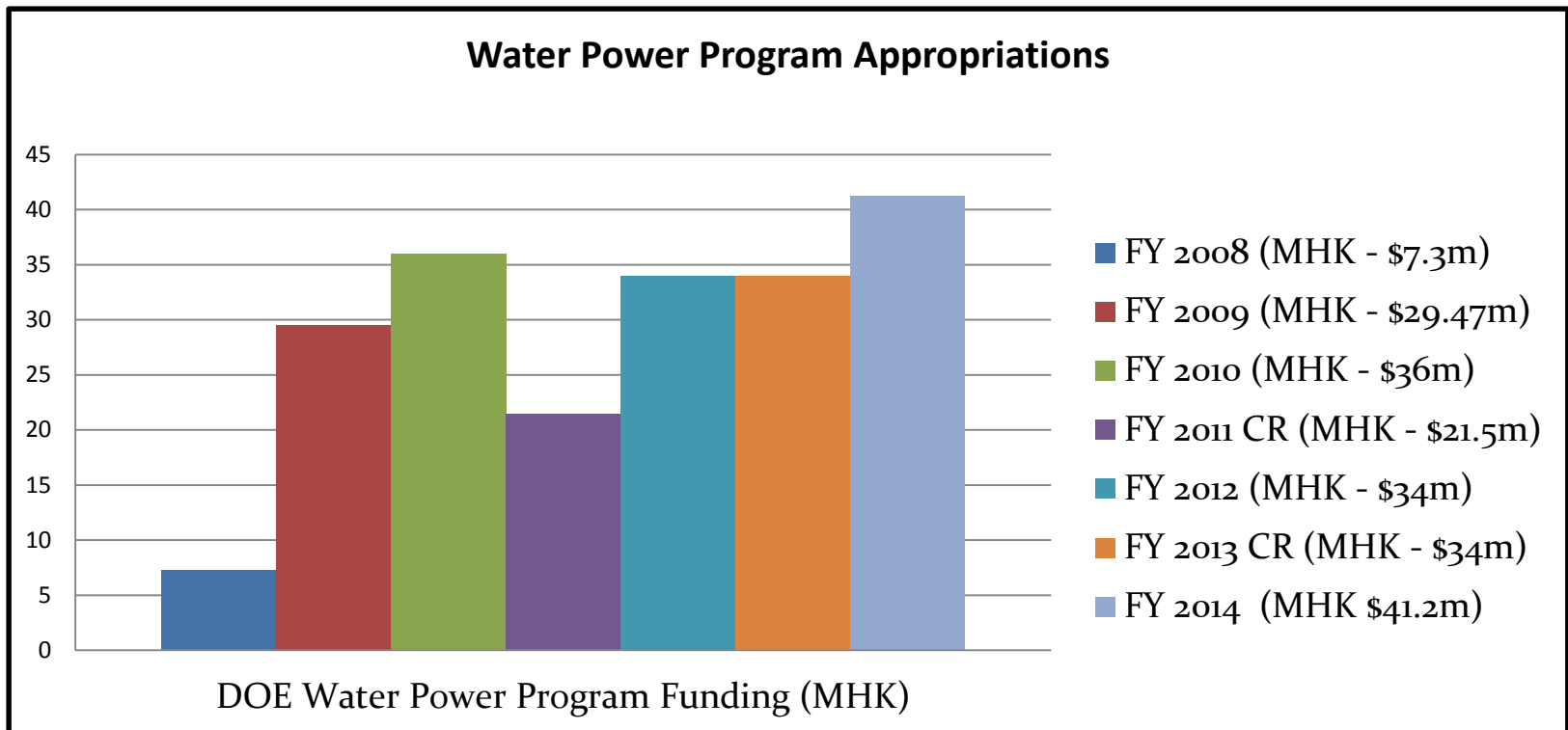
*funding includes American Recovery and Reinvestment Act of 2008

FY 2015 Budget Request



DOE Water Power Program

- 2005 officially recognized ocean energy as a qualified renewable resource.
- 2007 emphasized MHK technologies.
- DOE water power activities (to include new MHK focus) were restarted in FY 08.
- FY14 reflects highest funding level to date.



U.S. Government and Renewables

- Big vote today! If Senate flips, a different kind of gridlock, but Congress will be forced to govern
- Shutdown politics should disappear with 2016 Presidential election coming up and recent world events
- Executive Orders on Climate emissions – Obama keeps the “bully pulpit” for two more years
- Most states with RPS’s will likely keep them and improve
- Early markets still in play – Dept. of Defense RE goals, high COE areas (HI, AK, CA),
- Renewable Energy still popular – installed MW increasing

U.S. Policy & Funding Needs

- Stable and consistent funding for DOE Water Power program - need to compete with E.U on MHK technology commercialization
- DoD support for technology development and testing – First U.S. market for wave energy at Hawaii test site and autonomous solutions
- DOE-sponsored national MHK deployment timeline and technology roadmap - Streamlined framework for siting and permitting MHK devices
- Investment Incentives for new RE technologies (PTC, ITC, MLP's, 5-year depreciation)
- Continued support for Marine and Hydrokinetic Technology test centers

