

BLUE ENERGY



Powering the Planet with our Ocean

Our ocean,

with its continuous movement of surface winds, tides and currents, as well as differences in salinity and temperature, offers a naturally abundant source of energy that can be harnessed to generate power. In a time when the continued use of fossil fuels is leading to adverse impacts on our environment, marine resources and human health, a shift toward reliable, renewable energy has never been more crucial. Our coastlines have great potential for generating marine renewable power, and the Northwestern Coast of the U.S. is notably one of only a few areas in the world with abundant available resources for wave and other ocean power development.

Hosting the 2017 NOSB Finals Competition at Oregon State University (OSU) is extremely relevant and timely, given OSU's growing role in the future commercialization of marine renewable energies. OSU is part of the Northwest National Marine Renewable Energy Center (NNMREC), a consortium of faculty and students at OSU, the University of Washington, and the University of Alaska Fairbanks that conducts research and testing to harness the power of the ocean, inform policy decisions, and close gaps in scientific understanding of marine power. While just a few Marine Renewable Energy projects exist currently, the technology is advancing rapidly and the field is providing clean energy career opportunities for tomorrow's ocean leaders.

Our 2017 theme incorporates many new and current topics that are increasingly becoming popular news subjects as a shift toward renewable energies is realized. Marine renewable energy can be one of the many needed solutions to reducing future climate change, preserving our way of life, and securing a healthy and productive ocean for the generations to come.

Our "Blue Energy – Powering the Planet with our Ocean" theme includes many science disciplines and will encourage increased awareness and understanding of topics such as the:

- Various technologies used to harness energy from waves, tides, currents, wind and thermal gradients
- Challenges in implementing marine renewable energy projects
- Potential impacts of marine renewable energy technologies to ecosystems and marine life
- Challenges related to deploying, retrieving, and maintaining marine renewable energy technologies
- Current permitting and regulation policies relating to marine renewable energy systems
- Organizations and groups supporting marine renewable energy projects and commercialization for a sustainable future

2017 Regional Bowls: February 4 and 18, Across the Nation

2017 National Finals: April 20 – 23, Corvallis, Oregon

Please visit www.NOSB.org for more information.