

Narrative/Scope of Work (Attachment A)

Narrative

The Olympic/Kitsap Peninsulas region of the State of Washington has a vast sustainable resource that could rival the area's historic forest products and fishing industry in terms of economic benefits to the region and number of people employed. This sustainable resource comprises the energy extracted from tides, ocean waves and offshore winds. Additionally, biomass, thermal and solar energies are becoming viable energy alternatives in the region. The Olympic Peninsula has experienced a depressed economy since the downturn of forest products and the fishing industry in the 1980s and 1990s. Considerable effort has been spent since this downturn to attract new businesses and industries to the region to offset these economic losses, but no unifying economic theme has emerged that can replace these depressed industries. Sustainable ocean energy has the potential to provide that unifying economic theme.

Over the next 5 to 10 years billions of dollars will be spent by the Federal Government and private industry in the research and development, manufacturing, deployment and servicing of our fledging sustainable energy industry with goal to decrease the country's reliance on carbon-based energy. Energy extracted from tides, ocean waves, offshore wind, and other alternative sources will play a prominent role in our country's sustainable energy portfolio. These sources of sustainable energy could provide one-half of the electrical energy needs of coastal states in the United States. The Olympic Peninsula region is situated on the premier tidal power resource in the nation, and along with the State of Oregon, the best ocean wave and offshore wind resources in the nation.

A substantial industry will emerge around R&D, manufacturing, deployment, environmental monitoring, and operations and maintenance, and transmission in the region where these sustainable energy resources are located. Due to the nature and scale of the power generating devices that will be deployed, much of the production chain will be locally based rather than shipped. Given the sustainable resource base in the Olympic Peninsula, along with its ports, Utility Districts, marine manufacturing and service industry, and higher educational/workforce training resources, as well as the US Department of Energy's Marine Sciences Laboratory, the region has significant assets that would position it as a major regional sustainable energy hub.

In order to realize the economic benefits from this emerging sustainable ocean energy industry will require State, local and public entities to focus on the Olympic Peninsula's existing infrastructure that can support the industry, as well as developing new capabilities required to meet industry needs. These existing infrastructure and additional capabilities considerations include environmental, financial, education and industrial requirements. Building this sustainable energy hub will require bringing together regional representatives with technology developers, manufacturing and deployment vendors, site developers, and system operators.

One key requirement for fully realizing this opportunity is to establish an economic development roadmap for the Olympic Peninsula Regional Sustainable Energy Hub. The roadmap would analyze each of the necessary components of the new economic base (e.g., technology development and testing, deployment, financing, education, workforce training) relative to requirements, capacity, and growth trajectories. From this analysis, a roadmap would be built that establishes priority actions, timelines, key players/action agencies, and key milestones/decision points. This strategic roadmap would serve to guide, align, and coordinate investment and action by the diverse components necessary to realizing this new economy.

Scope of Work

This project is the first phase of a multi phased effort to develop a **Comprehensive Strategic Sustainable Energy Roadmap (CSSER)** during the last quarter of the 2011 calendar year. It has been estimated that the scope and reach of the CSSER will require funding at the \$250,000 level. The initial funding requested by this proposal is vital to subsequent funding success.

We have a short time line. During these challenging financial times, successfully competing for that level of funding will be very competitive. In addition, the sense of urgency that our region is experiencing is twofold:

First, the Sustainable Portfolio Standards targets required by 2020 (15%) and, second, the competition coming from Oregon and California in establishing sustainable energy dominance on the west coast.

Phased project description

Phase I: Development of a regional team consisting of representation from four EDCs, two IPZs, with support from 2 Workforce Development Councils and the Pacific Northwest Center of Excellence for Clean Energy (PNCECE).

Phase II: **(funded by Cluster Grant Program)** Contracting with economic development experts in the field of sustainable energy who will facilitate, guide and write a regionally representative pre-planning document that serves as a template for funding and creating a regional **Comprehensive Strategic Sustainable Energy Roadmap (CSSER)**.

The Department of Commerce funded activity is sustainable because it is the important first step in seeking significant additional funding for the CSSR. It is the intention of this project to share the completed work with other communities who could benefit from its concepts.

Additional activities not funded within the Cluster Grant Program award but occurring during the time frame: Energy Conference September 2011 and additional (4) community presentations on renewable energy January – May.

Phase III: (to be funded at the \$250,000 level) A comprehensive strategic document (CSSER) for regional use similar to a county's comprehensive plan. It will guide regional business development, retention, expansion, and recruitment efforts in sustainable energy. It will also serve to unify policy direction, guide shoreline management, infrastructure, planning and permitting decisions in sustainable energy.

Collaboration/partners

Initially, the team will consist of representation from two Innovation Partnership Zones, and EDC representation from Jefferson, Grays Harbor, Kitsap, and Clallam Counties, Also, the team will collaborate with the two workforce development councils (Pacific Mountain and Olympic) along with support from the Pacific Northwest Center of Excellence for Clean Energy (PNCECE).

Benefits

The benefit of growing a brand new industry cluster in Washington State that is geographically tied to Washington's coastal, rural counties and will provide benefits to the entire state is immeasurable. This pre-planning document is the foundation for funding the much larger community project represented by the CSSER. If the communities do not accomplish timely due diligence, at least two negative impacts may occur: First, the community will not be able to perform as a strong, cohesive partner with Pacific Northwest National Labs in a successful Department of Energy application in 2013. Second, the sustainable energy industry will develop in this region in spite of the region's input and we will find ourselves playing "catch up" when it does. The grant allows us to begin the required regional due diligence now rather than later.

Compliments industry skill panels

This industry cluster will not only expand new job opportunities, but will allow business diversification for established industries as identified in the intracoastal maritime technology and construction skills panel's strategic initiatives:

- Increase the size and quality of the talent pool to support and expand intracoastal industries that create high skill, high wage jobs and provide the region a competitive advantage in national and international markets.

- Enhance the capacity of the education, workforce and economic development systems to meet the needs of the Intracoastal industries and its workers.
- Catalyze innovation and foster an entrepreneurial climate for business creation and expansion.

As the following statement indicates, it will be very beneficial to have the skills panel model in place during these pre-planning and planning activities:

“Industry Skill Panels, such as the Intracoastal Alliance, (will) help employers move from the sidelines to the frontlines, to take a central role in discussing specific workforce needs with other manufacturers, workforce professionals, community leaders, and educators. (The Intracoastal Marine) Skill Panel (will) enable competitors to collaborate in addressing common skill gaps, training needs and setting and monitoring performance outcomes.” These discussions will occur within the Pre-Planning baseline development portion of the project.

Building linkages

This project will build linkages and joint projects within industry skill panels because this industry has the potential of affecting other industries including boat building, composites, manufacturing, engineering (electrical, mechanical, systems, and marine), technician level machining and maintenance, etc. Through the completed baseline research, and the subsequent CSSER, workforce partners will work together to upgrade and close skills gaps through job skills programs, customized training programs, and incumbent worker training.

Also, the partnership between the two Innovation Partnership Zones is an example of a higher level of innovative collaboration.

Project implementation

The actual project has already begun in January 2011 at the communication and collaboration level. On short notice, support letters received from Workforce Development Councils, 4 EDCs, IPZ representatives, and Clean Energy Center of Excellence supported the recognized importance of the proposed grant activities. (See attached letters). Preplanning experts have already been identified. Daily guidance from PNNL staff on technical aspects of the pre-planning work supports the efficient use of funds and team members’ time. At the time of the award, the team will meet, discuss next steps, and learn about potential consultant experts in economic development and sustainable energy. See timeline:

Date	Activity
January	Identification of expert consultants
	Interviewing potential interns for baseline data gathering
February	Outline of activities developed with guidance from expert consultants
	Identification of baseline demographics developed with team and intern
March-April	Continuation of information Gathering
May	Rough draft of preplanning document
June	Completion of preplanning document

Expected outcomes

There are three expected outcomes from this project: 1) the development of a large regional team who will continue to work together bringing future sustainable energy activities to the region. 2) A written documentation of our baseline asset mapping in workforce, business, projects, etc. and 3) A completed pre-planning document that will be used in seeking future funding for the **Comprehensive Strategic Sustainable Energy Roadmap (CSSER)**.