



ENERGY & THE OCEAN

By Chad Nelsen

Last summer, when gas prices neared \$5 per gallon and “Drill, Baby Drill” became a campaign slogan, Americans were reawakened to our dangerous and dependent energy policies. Not since the 1970s had energy issues been so prominent in the public consciousness. Once again it became glaringly obvious that we are not only overly dependent on climate-warming fossil fuels, but also that we get much of that petroleum from foreign countries—not all of whom are friendly.

A quick check of the facts in combination with the staggering drop in oil prices last fall, demonstrated the futility of offshore drilling as a means of solving our energy crisis. Offshore drilling would only account for 3% of the world’s oil supply

This summer’s gas price bubble reminded us that now is the time to invest in alternative energy sources that will reduce emissions of greenhouse gases while providing domestic sources of energy, spurring innovation and creating jobs.

As Surfrider Foundation’s policy on climate change acknowledges, increased warming of the Earth’s atmosphere will be felt severely at our coasts. Impacts range from increased coastal erosion and flooding, increased severity of storms, loss of wetlands, acidification of the oceans and threats to coral reefs. The key element to turning around global climate change is to reduce our dependency on fossil fuels for energy.

When looking into our energy sources, it is important to understand that we have two primary energy uses that come from different sources. One major energy use

is transportation (cars, shipping, trains, airplanes, etc.). Transportation is powered almost exclusively on petroleum. The other major energy use is electricity to power our houses, office buildings, etc. Electricity has traditionally derived from a mix of sources including coal, hydroelectric, nuclear and natural gas.

The move to electric-powered transportation will alter this balance and increase our electricity needs while decreasing our petroleum needs (unless we start using more petroleum to generate electricity).

There are a number of new alternative energy sources that are being developed that are designed to tap into natural energy along the coasts and in the oceans to create electricity. These include wind, tidal, wave and current energy. All of these sources hold the promise of creating domestically-available renewable and clean energy that could also support economic development along the coasts. However, there are many questions and concerns about ocean energy, including potential impacts to ocean recreation, nearshore ecology, coastal processes, public safety, aesthetics, and fishing access.

The conflict between supporting clean, renewable energy sources and working to protect the coast from potential impacts presents us with a challenge. It would be easy to succumb to a “Not In My Back Yard” (NIMBY) mentality and just say no to these projects. But by saying no to these projects we are inherently saying yes to some other source of energy that may have negative global ramifications (e.g. coal). The question remains, how can we

support clean energy sources along the coasts while minimizing their impacts to our oceans, waves and beaches.

We believe the answer is to constructively participate in project planning and to promote a set of “best practices” to ensure that these impacts are minimized to the full extent possible

In this series, we will explore efforts to open new areas to offshore drilling and innovative technologies such as wave energy, wind power, tidal and current energy. We will describe how they work, what the state of the technology is, and how they may impact the coast.

Chad is Surfrider Foundation’s Environmental Director.

We hope you will join this conversation on our blogs:

Oil Drilling Blog: www.notttheanswer.org
Wave Energy Blog: www.surfrider.org/waveenergy

For more information see:
Global Warming Policy: http://www.surfrider.org/policy_ocean_alt_energy.asp
Alternative Energy Policy: http://www.surfrider.org/policy_gw.asp

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