



# Navy Earth Day 2011 Video Podcast



*Transcript of April 2011 remarks by Rear Admiral Phil Cullom, Director, Task Force Energy and the Chief of Naval Operations Energy and Environmental Readiness Division*

Hello. I'm Rear Admiral Phil Cullom, Director of Navy's Task Force Energy and the Chief of Naval Operations Energy and Environmental Readiness Division. I am posting this podcast in advance of this year's commemoration of Earth Day, which occurs on Friday, April 22<sup>nd</sup>.

It is hard to believe that Earth Day has been around for 41 years, but it has. For many of you, you may not remember a time when we did not take a day to celebrate the value the Earth brings to us.

But for some of us, we remember vividly the days before the word *ecology* was a household word – when daily broadcasts of smog alerts occurred every summer in our big cities, the sides of highways were filled with trash, or rivers occasionally caught fire. The first Earth Day in 1970 was that point where we said “enough is enough” – that it was time to do something about how we were living.

And in the last four decades, we as Americans have done a lot to clean up our air, water, and our land. And we as Navy professionals have changed a lot about how we go about our daily operations that reflects that national and global understanding of our planet.

As with any recurrent anniversary, it's easy to have this day fade into the wallpaper of “calendar days we ignore” because we don't get a day off from work. This year, however, I would challenge us to look at this day much as those assembled in 1970 for the first Earth Day conference did...with clarity of purpose and a certain sense of urgency to the mission.

The reason to once again get energized on the purpose of Earth Day is in some part due to drama we are seeing playing out before us with regard to oil, its use, and availability. We hear about possible interruptions to supply, the resurgence of global demand for this liquid gold, and the linkage between fossil fuels and greenhouse gases. The subjects of limited energy resources and the environmental impact associated with all sources of energy are ever more linked...and lead us to once again pose the fundamental question of how long we can continue to live this way.

It is for this reason that I want you to remember one word from this Earth Day and that word is – **anthropocene**....I will come back to that shortly.

This year's theme for Earth Day is “Partnering for a Greener Future,” which I would say highlights the vital importance of collaborating with outside organizations to accomplish our goals of environmental stewardship and responsible use of energy. We talk frequently about

how our partnerships for energy efficiency will improve the endurance or range of our ships and aircraft, improving our combat capability, but efficiencies have an ancillary benefit of minimizing our logistics tether, saving fuel and money, decreasing emissions in terms of hydrocarbons and greenhouse gases. Partnerships that result in a barrel of fuel not burned or the MBTU not consumed are among the most important we can make because we end up saving those barrels and MBTUs forever...in perpetuity...which benefits the Navy, the nation, and the environment.

Other partnerships, such as our work with the state of Maryland and the Environmental Protection Agency on approaches for preserving the fragile ecosystem of the Chesapeake Bay directly preserve our environment in perpetuity.

Navy continues to work closely with the National Marine Fisheries Service to obtain permits enabling us to train our forces effectively while being protective of the environment. We have completed the first round of environmental planning for 11 of 14 at-sea training ranges and operating areas, and will address the three remaining ranges this summer. We are also collaborating with non-governmental organizations through informal roundtable discussions on energy and environmental topics of shared concern.

On alternative fuels, we are working with industry partners to test and certify advanced biofuels for use in our aircraft, ships, and tactical support equipment. These fuels are not ethanol or early development biofuels, some of which compete with food supplies or other water usage needs. We have engineered these advanced generation biofuels to serve as 'drop-in' replacements that require no modification of current aircraft or shipboard engines and are indistinguishable in performance for our warfighters. Best of all, the feedstocks that are either waste streams or from biofuels that can be grown on marginal lands impact the environment the least and are sustainable over the long haul. In the end, they will allow us to continue to do our mission, without the ever increasing price associated with a diminishing resource, and to do so long into the future.

And that brings me back to the word **anthropocene**...

Coined by a Dutch Nobel Prize chemist (Dr. Paul Crutzen) over a decade ago, **anthropocene** describes a new time period into which we have entered – a geologic epoch defined by our own massive impact on the planet. Scientists believe it is characterized by changing seas, urban supersprawl, planetary resource limitations for energy and water, and a perfect trifecta of population, technology and affluence that should make us question how many living, breathing humans the planet can really support.

Think about that fact on Earth Day. With at least another billion people on the planet today, now more than ever before, we need to understand how our daily decisions and behaviors with regard to the environment affect both combat capability and the planet we all share.

Then ask yourself, what can you do to make a positive difference to minimize our impact on the planet? What you can do to create a culture change for energy as profound as the one we saw four decades ago?

As promising as the innovations we and our many partners are pursuing may be, it is only through a combination of technology and personal behavior that energy's full potential as an enabler of combat capability and sustainability will be achieved. We must adopt a spartan, energy-frugal mindset, considering fuel as valuable to our ships, planes and tactical vehicles as ammunition is to a weapon system. Forty years ago, we changed our mindset about the environment and did something about it. We incorporated greener practices aboard our ships and at our installations as we gained appreciation for our ecological system called planet Earth.

It's time to do the same for energy – change our culture and change our behaviors. Once that culture change occurs, profound change can take place on a much broader scale. Many of these initiatives, when fully implemented, not only help the Navy & the nation be more energy secure. They will minimize greenhouse gas emissions and other forms of air pollution & help us to do our mission...in perpetuity. Remember, there is no planet B.

To the entire Navy team, I thank you for your patriotic support of our nation and for helping others to understand the Navy's strong energy and environmental commitment through participating in Earth Day activities. For more information, please visit our energy, environment, and climate change website at [www.greenfleet.dodlive.mil](http://www.greenfleet.dodlive.mil).