



VALUING NATURE'S CAPITAL

Forest Service Carbon & Ecosystem Services Update

12.26.08

No one can do everything. Everyone can do something.

Are you a whiz when it comes to green trivia? Find out how much you know about the big environmental news stories of 2008 by taking "The Year in Green" Quiz at: <http://www.sierraclub.org/2008quiz/>

News:

Iowa Ex-Governor Picked for Agriculture Secretary

President-elect [Barack Obama](#) has selected former Gov. [Tom Vilsack](#) of [Iowa](#) to serve as his agriculture secretary, according to officials familiar with the decision, and will make the announcement on Wednesday as he works to round out his remaining cabinet nominations.

http://www.nytimes.com/2008/12/17/us/politics/17appoint.html?_r=1&th&emc=th

Salazar and Vilsack could become major climate players

For years, environmental advocates have been waiting for change in the Interior and Agriculture departments, hoping that new leaders would move global warming to the top of the agencies' agendas. Will Sen. Ken Salazar (D-Colo.) as Interior secretary and former Iowa Gov. Tom Vilsack (D) as Agriculture secretary grant green groups their wish?

Available by subscription at: <http://www.eenews.net/climatewire/rss/2008/12/18/2>

Or full text available at end of newsletter.

Obama Team Primed to Push Climate Change Agenda

President-elect [Barack Obama](#)'s new "green dream team" is committed to battling climate change and ready to push for big policy reforms, in stark contrast with the Bush administration, environmental advocates said on Monday.

<http://www.reuters.com/article/environmentNews/idUSTRE4BL4HQ20081223?feedType=RSS&feedName=environmentNews>

Tough Climate Goals may be Easier than Feared

Tough targets for avoiding dangerous global warming may be easier to achieve than widely believed, according to a study that could ease fears of a prohibitive long-term surge in costs.

<http://www.reuters.com/article/environmentNews/idUSTRE4BL4SN20081222?feedType=RSS&feedName=environmentNews>

Summary of Worldwide Lignocellulosic Ethanol Progress

The urgency of the quest to produce fuel from woody and other plant wastes has been heightened by the 'food versus fuel' debate. Technologies for processing plant matter into usable fuels are evolving. Pilot labs are racing to perfect chemical techniques and produce the ultimate new, second-generation biofuel. Will it work at large scale? And what will it cost? Jeff Decker reports.

<http://www.renewableenergyworld.com/rea/magazine/story?id=54346>

Modified Woody Plants May Yield More Biofuel

Plants, genetically modified to ease the breaking down of their woody material, could be the key to a cheaper and greener way of making ethanol, according to researchers who add that the approach could also help turn agricultural waste into food for livestock.

<http://www.sciencedaily.com/releases/2008/12/081222163051.htm>

USDA Establishes the Office of Ecosystem Services and Markets (OESM), Sally Collins to lead

<http://www.usda.gov/wps/portal/!ut/p/ s.7 0 A/7 0 10B?contentidonly=true&contentid=2008/12/0307.xml>

Welcome to the NASQUACK: An exchange for species rather than stocks

Imagine for a moment that you own an acre of valuable land in California and you'd like to build some houses on it. But, to your horror, the government tells you that your land is home to several pairs of a threatened species of wetland bird, the California Black Rail. You cannot build it unless you can find some way to mitigate the damage you will do this species.

http://www.economist.com/world/international/displayStory.cfm?story_id=12792460

San Francisco Fliers May Pay their Way in Carbon Usage

Environmentally conscious travelers flying out of San Francisco International Airport will soon be able to assuage their guilt and minimize the impact of their air travel by buying certified carbon offsets at airport kiosks.

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/12/23/MNIR14PSQF.DTL&tsp=1>

Advice from Retiring Climate Warrior (Senator and former USFS employee, John Warner, R-Va): Give the President a "Throttle"

Congress needs to give President-elect Barack Obama the power to control the rate of emissions reductions if it is to pass sweeping climate change legislation, retiring Sen. John Warner (R-Va.) said in a recent interview. Article continues at end of newsletter, or click here to read full text:

<http://www.eenews.net/climatewire/rss/2008/12/24/5> (subscription required).

Californians Shape Up as Force on Environmental Policy

California Democrats will assume pivotal roles in the new Congress and [White House](#), giving the state an outside influence over federal policy and increasing the likelihood that its culture of activist regulation will be imported to Washington.

<http://www.washingtonpost.com/wp-dyn/content/article/2008/12/28/AR2008122801704.html?hpid=topnews>

Abrupt Climate Change: Will it Happen this Century?

The United States faces the potential for abrupt climate change in the 21st century that could pose clear risks to society in terms of our ability to adapt.

<http://www.climateark.org/shared/reader/welcome.aspx?linkid=114173>

<http://www.washingtonpost.com/wp-dyn/content/article/2008/12/24/AR2008122402174.html?hpid=topnews>

<http://www.climate-science.gov/Library/sap/sap3-4/final-report/default.htm>

In last week's Carbon Market North America Newsletter by Point Carbon:

- Cheaper oil to test US climate commitment
- RGGI prices and market commentary
- Obama introduces green team
- New Jersey sets GHG plan
- California to begin heavy-lifting to implement GHG cuts
- Virginia should not join regional trading systems: report
- Canada needs to prove tar sands not dirty: report
- and more...

<http://www.pointcarbon.com/news/cmna/1.1024718>

Op-Eds:

Fixing Agriculture

Tom Vilsack, President-elect Barack Obama's choice to lead the Agriculture Department has the merit of being unsatisfactory to both extremes of the farm-policy debates.

<http://www.nytimes.com/2008/12/19/opinion/19fri3.html>

An Emissions Plan Conservatives Could Warm To

Conservatives don't support tax increases that are veiled as "cap and trade" schemes for pollution permits. But offer us a tax swap, and we could become the new administration's best allies on climate change.

<http://www.nytimes.com/2008/12/28/opinion/28inglis.html?bl&ex=1230613200&en=dca39d677a5bac74&ei=5087%0A>

Blogs:

Northeast States Net \$106 Million From Carbon Auction

Ten Northeastern states took in \$106.5 million from their for carbon-dioxide emissions allowances, and much of the money will go toward energy efficiency programs. All allowances on offer were sold, and the clearing price of \$3.38 was slightly higher than that of the first auction, in September. (Each allowance corresponds to one ton of carbon emissions.) There had been some fear that economic doldrums could dampen demand, but this did not materialize, although carbon prices in the Northeast remain low relative to Europe.

<http://greeninc.blogs.nytimes.com/2008/12/19/northeast-states-net-106-million-from-carbon-auction/>

Reports:

Forest Carbon Offsets: A Scorecard for Evaluating Project Quality

Published by the Manomet Center for Conservation Sciences.

<http://www.manometmaine.org/>

And, on a somewhat related note:

Getting There Greener: The Guide to Your Lower Carbon Vacation

http://www.ucsusa.org/clean_vehicles/solutions/cleaner_cars_pickups_and_suvs/greentravel/getting-there-greener.html

Journal Articles:

Campbell, J.; Alberti, G.; Martin, J.; Law, B. E. Carbon dynamics of a ponderosa pine plantation following a thinning treatment in the northern Sierra Nevada. *Journal of Forest Economics*. pp. 453-463

<http://www.ieonline.com/cgi-bin/doiR/BZSK/0378-1127/10.1016/j.foreco.2008.09.021>

Fisher, B.; Turner, R.K.; Morling, P. 2009. Defining and classifying ecosystem services for decision making.

Ecological Economics 68, 643-653.

The concept of ecosystems services has become an important model for linking the functioning of ecosystems to human welfare. Understanding this link is critical for a wide-range of decision-making contexts. While there have been several attempts to come up with a classification scheme for ecosystem services, there has not been an agreed upon, meaningful and consistent definition for ecosystem services. In this paper we offer a definition of ecosystem services that is likely to be operational for ecosystem service research and several classification schemes. We argue that any attempt at classifying ecosystem services should be based on both the characteristics of the ecosystems of interest and a decision context for which the concept of ecosystem services is being mobilized. Because of this there is not one classification scheme that will be adequate for the many contexts in which ecosystem service research may be utilized. We discuss several examples of how classification schemes will be a function of both ecosystem and ecosystem service characteristics and the decision-making context.

<http://www.scopus.com/scopus/inward/record.url?eid=2-s2.0-57149107777&partnerID=40>

Gaboury, S.; Boucher, J. F.; Villeneuve, C.; Lord, D.; Gagnon, R. Estimating the net carbon balance of boreal open woodland afforestation: A case-study in Quebec's closed-crown boreal forest. *Journal of Forest Economics* pp. 483-494

<http://www.ieonline.com/cgi-bin/doiR/BZSK/0378-1127/10.1016/j.foreco.2008.09.037>

Ingraham, M.W.; Foster, S.G. 2008. The value of ecosystem services provided by the U.S. National Wildlife Refuge System in the contiguous U.S. *Ecological Economics* 67, 608-618.

Studies that demonstrate the economic value of the ecosystem services provided by public conservation lands can contribute to a more accurate appraisal of the benefit of these lands. The objective of this study was to estimate the economic value, in real (2004) dollars, of the ecosystem services provided by the U.S. National Wildlife Refuge System (Refuge System) in the contiguous U.S. In order to estimate this value, we determined the ecosystems present on the Refuge System in the contiguous 48 states, the proportion in which they are represented, and the dollar value of services provided by each. We used land cover classes as an approximation of ecosystems present in the Refuge System. In a geographic information system (GIS), we combined land cover geospatial data with a map of the Refuge System boundaries to calculate the number of acres for each refuge and land cover class within the Refuge System. We transferred values for the following ecosystem services: climate and atmospheric gas regulation; disturbance prevention; freshwater regulation and supply; waste assimilation and nutrient regulation; and habitat provision. We conducted a central tendency value transfer by transferring averaged values taken from primarily original site studies to the Refuge System based on the ecoregion in which each study site and refuge was located and the ecoregion's relative net primary productivity (NPP). NPP is a parameter used to quantify the net carbon absorption rate by living plants, and has been shown to be correlated with spatially fungible ecosystem services. The methodologies used in the site studies included direct market valuation, indirect market valuation and contingent valuation. We estimated the total value of ecosystem services provided by the Refuge System in the contiguous U.S. to be approximately \$26.9 billion/year. This estimate is a first cut attempt to demonstrate that the value of the Refuge System likely exceeds the value derived purely from recreational activities. Due to limitations of current understanding, methods and data, there is a potentially large margin of error associated with the estimate.

<http://www.sciencedirect.com/science/article/B6VDY-4RTKMSP-3/2/afeed509d93a587ceb4fb68326ce42c8>

Lippke, B.; Perez-Garcia, J. 2008. Will either cap and trade or a carbon emissions tax be effective in monetizing carbon as an ecosystem service. *Forest Ecology and Management* 256, 2160-2165.

Economists argue that if the cost of carbon emissions was bid into markets, consumers would effectively make purchases that would reduce emissions. Life-cycle inventory and assessment studies have identified how to make many environmental improvements such as reducing carbon emissions at every stage of processing. Most importantly, almost every change in building design, product selection alternative or forest management alternative results in changed levels of carbon emissions across many different stages of processing. These studies raise questions about the effectiveness of carbon registries, cap and trade systems or taxes to effectively monetize the reduction of carbon emissions. A three-tier credit system that accounts for carbon sequestration and storage in the forest sector including users of forest products can mimic many of the expected effects of an economy-wide carbon tax. Insight is provided on policies that are more likely to reflect the value of carbon emissions in purchasing and production systems and to avoid counterproductive results. The relationship between carbon emissions and other forest ecosystem services such as habitat is also examined.

<http://www.scopus.com/scopus/inward/record.url?eid=2-s2.0-55549108028&partnerID=40>

Papaik, M. J., B. Sturtevant, and C. Messier 2008. Crossscales and disciplines to achieve forest sustainability. *Ecology and Society* 13(1): 30.

Forest land managers are faced with unprecedented global pressures to produce resources for human consumption (e.g., Liu and Diamond 2005), while still maintaining essential ecosystem services benefiting society at multiple spatial scales (Costanza et al. 1997). These global pressures alone present daunting challenges to sustainable forest management (SFM) worldwide (Lunnan et al. 2004, Essman et al. 2007), but they are occurring in the context of an unprecedented rate of climate change (Solomon et al. 2007) that is anticipated to have drastic effects on forest ecosystem productivity and function (Melillo et al. 1993, Dale et al. 2001, Garcia-Gonzalo et al. 2007). The rate and scale of these social, economic, and environmental changes facing forestry worldwide underscores an urgent need to understand their

multiscale interactions and use that insight to guide SFM planning efforts into an uncertain future (Innes and Hickey 2006).

<http://www.ecologyandsociety.org/vol13/iss1/art30/>

Sarker, A.; Ross, H.; Shrestha, K.K. 2008. A common-pool resource approach for water quality management: An Australian case study. *Ecological Economics* 68, 461-471.

Water is perhaps one of the most studied types of common-pool resource (CPR) goods. Its quality, however, has not been discussed as much in the CPR literature as its quantity. We examine the significance of studying water quality from a CPR perspective, and then analyze implications for the formulation of institutional arrangements to improve water quality. We illustrate with a case study in South East Queensland, Australia. This involves a rural catchment (watershed) that contributes high sediment and some nutrient loads to the Brisbane River, where it affects urban water quality and visual amenity, water treatment costs, and dredging costs at the port. The pollutants then threaten marine water quality and habitat values for threatened species in Moreton Bay, a marine protected area. We analyze the potential for a CPR understanding to enhance the design and financing of a water quality management regime. Rather than seeking to supplant conceptualizations of externalities as a basis for design of policy instruments, we propose arrangements that combine the CPR and externality concepts to offer a powerful logic and financial basis for collective management. Market-based instruments could facilitate downstream populations to help pay for catchment restoration in return for enjoyment of improved water quality resulting from strengthened ecosystem services, while associated non-market-based instruments could help all parties understand and expand their roles under a common-pool management regime. We argue that recognition of CPR attributes provides a logic for cooperation and co-investment between stakeholders who are in a position to affect, or are affected by, water quality in different parts of a large river system.

<http://www.sciencedirect.com/science/article/B6VDY-4SPD3W9-3/2/4aa015f727be631c3860a2c15611f436>

Wamelink, G.W.W.; van Dobben, H.F.; Mol-Dijkstra, J.P.; Schouwenberg, E.P.A.G.; Kros, J.; de Vries, W.; Berendse, F. Effect of nitrogen deposition reduction on biodiversity and carbon sequestration. *Forest Ecology and Management*.

Global warming and loss of biodiversity are among the most prominent environmental issues of our time. Large sums are spent to reduce their causes, the emission of CO₂ and nitrogen compounds. However, the results of such measures are potentially conflicting, as the reduction of nitrogen deposition may hamper carbon sequestration and thus increase global warming. Moreover, it is uncertain whether a lower nitrogen deposition will lead to a higher biodiversity. We applied a dynamic soil model, a vegetation dynamic model and a biodiversity regression model to investigate the effect of nitrogen deposition reduction on the carbon sequestration and plant species diversity. The soil and vegetation models simulate the carbon sequestration as a result of nitrogen deposition and they provide the biodiversity model with information on the soil conditions groundwater table, pH and nitrogen availability. The plant diversity index resulting from the biodiversity model is based on the occurrence of 'red list' species for the tree soil conditions. Based on the model runs we forecast that a gradual decrease in nitrogen deposition from 40 to 10 kg N ha⁻¹ y⁻¹ in the next 25 years will cause a drop in the net carbon sequestration of forest in The Netherlands to 27% of the present amount, while biodiversity remains constant in forest, but may increase in heathland and grassland.

<http://www.scopus.com/scopus/inward/record.url?eid=2-s2.0-57249091558&partnerID=40>

Yang, W.; Chang, J.; Xu, B.; Peng, C.; Ge, Y. 2008. Ecosystem service value assessment for constructed wetlands: A case study in Hangzhou, China. *Ecological Economics* 68, 116-125.

Based on a comprehensive analysis of various classifications of natural resource values, we summarized an ecological economic value system of constructed wetland (CW) ecosystems for treating eutrophic water. Using the CW located at the Hangzhou Botanical Garden as an example, the contingent valuation method (CVM) and shadow project approach (SPA) were applied to estimate the economic values of CW

system ecosystem services. The CVM estimated a value of 800,000 yuan (yuan: Chinese Currency, 7.6 yuan = 1 USD as of August, 2007) as the total economic value of the CW in a twenty year period. Meanwhile, the SPA calculated a value of 23.04 million yuan as the total economic value of the CW in a twenty year period. It is determined that compared to the CVM, the SPA provides a more approximate value of the true monetary value of the Hangzhou Botanical Garden CW. This study could fill the gap of knowledge and provide a benchmark when evaluating constructed ecosystem services and help policy makers to promote the development of constructed wetlands in China.

<http://www.sciencedirect.com/science/article/B6VDY-4S26RTJ-4/2/9376be81174df0800675d05d3624b501>

A little bit older (July 2008), but I just came across this *excellent* compilation of Ecosystem Services articles:

Proceedings of the National Academy of Science. *PNAS* July 15, 2008 vol. 105 no. 28 9449-9450. Ecosystem Services Special Feature. <http://www.pnas.org/content/105/28.toc#EcosystemServicesSpecialFeature>

Events:

Climate Change: A Threat to Life and a New Energy Future
Ongoing Exhibit at the American Museum of Natural History. NYC. Oct 18, 2008 – August 16, 2009.
<http://www.amnh.org/exhibitions/climatechange/>

Carbon Markets North America 2009. Environmental Finance. Jan 15-16, 2009. Coral Gables, FL.
<http://www.environmental-finance.com/conferences/2009/Miami09/intro.htm>

Voluntary Carbon Markets USA. Green Power Conferences. Jan 22-23, 2009. NYC.
http://www.greenpowerconferences.com/carbonmarkets/vcm_us09.html

Carbon Trading: Investment Opportunities across the Carbon Credit Markets. Finance IQ. January 26-28, 2008. NYC. <http://www.igpc.com/ShowEvent.aspx?id=146222>

The Climate Registry Climate Policy Forum: "Charting the Path Ahead." (<http://www.theclimateregistry.org/>)
Southeast (Tampa, FL) – Feb 3
Western (Denver, CO) – Feb 26
Midwest (Columbus, OH) – Mar 11

Ecosystem Services: Marketing Environmental Solutions. Virginia Tech. March 12-13, 2009. Charlottesville, VA.
<http://www.cpe.vt.edu/esmes/index.html>

National Mitigation and Ecosystem Banking Conference: Banking Under the New Rule. May 5-8, 2009. Salt Lake City, UT. <http://www.mitigationbankingconference.com/>

Avoiding Deforestation in the Amazon through PES Markets. 2009 Katoomba Meeting. Mato Grosso, Brazil. April 1-2, 2009. http://www.katoombagroup.org/event_details.php?id=26

Carbon in Northern Forests: Integration of Research and Management. June 10-11, 2009. Traverse City, MI.
<http://forest.mtu.edu/cinf/>

Full Text of Selected Articles:

POLICY: Salazar and Vilsack could become major climate players (12/18/2008)

Christa Marshall and Jessica Leber, E&E reporters

For years, environmental advocates have been waiting for change in the Interior and Agriculture departments, hoping that new leaders would move global warming to the top of the agencies' agendas.

Will Sen. Ken Salazar (D-Colo.) as Interior secretary and former Iowa Gov. Tom Vilsack (D) as Agriculture secretary grant green groups their wish?

Their backgrounds and their comments yesterday at a Chicago press conference provide a mixed picture.

"I look forward to working directly with President-elect [Barack] Obama as an integral part of his team as we take the moon shot on energy independence. That energy imperative will create jobs here in America, protect our national security and confront the dangers of global warming," said Salazar at the press conference with Vilsack and Obama. He mentioned climate change only once in prepared remarks, while Obama did not bring up the issue, even when asked about top priorities for the Interior Department.

The president-elect emphasized, though, that he wants Salazar to be part of all his administration's energy decisions and to make the Interior Department "proactive" in its approach and less susceptible to lobbying. The prospect of the two men sitting at the table as Obama hashes out a climate blueprint raises questions about what advice they will offer and how far they will go in integrating climate change into their decisions.

In the Senate, Salazar voted to bring major climate legislation to a vote and promoted passage of a national renewable standard requiring utilities to generate a percentage of power from wind, solar and other alternative sources. He gave speeches about the impact of global warming in the West, including its potential squeeze on the water supply, and advocated clean energy tax incentives.

He co-sponsored an amendment pushing for farmers and ranchers to be rewarded for using their lands to capture and store carbon dioxide.

A moderate who listened to industry and sought to bring climate to a vote

At the same time, Salazar built a reputation as a moderate who listened to industry interests and supported a future for coal-fired electricity. He authored legislation now in law for the U.S. Geological Survey to assess appropriate geological formations for long-term storage of greenhouse gases and pushed for coal incentives in the Energy Policy Act of 2005.

He also voted against an amendment calling on the Army Corps of Engineers to consider global warming in water development projects.

Those aspects of Salazar's background worry some environmental groups, which noted yesterday that he will play a key role in picking underlings at Interior who will be pivotal to global warming policy. Some of the agencies that will be under Salazar's watch also play a limited role in approving new coal-fired power plants.

"Salazar has a history of endorsing people like [former Interior Secretary] Gale Norton and [former Attorney General] Alberto Gonzales who became mired in scandal," said Kieran Suckling at the Center for Biological Diversity. "That worries us a great deal. He's not reform-minded enough."

Some skeptics, but Sierra Club is charmed

But other environmental groups praised the choice. The League of Conservation Voters noted in a press release that Salazar had earned a score of 81 percent on a lifetime environmental report card.

Sierra Club Executive Director Carl Pope, meanwhile, said in a statement: "Senator Salazar has also been a leading voice in calling for the development of the West's vast solar, wind, and geothermal resources. He will make sure that we create the good-paying green jobs that will fuel our economic recovery without harming the public lands he will be charged with protecting."

In his new role, Salazar can tap into a bevy of recommendations on how to integrate climate change into decision-making at the department, which manages one-fifth of the nation's landmass. Recently, 29 environmental groups released a [report](#) outlining how global warming should fit into multiple government agencies, including calls to incorporate the issue into decisions at the department's Bureau of Reclamation and Fish and Wildlife Service.

Beyond addressing issues such as whether the Endangered Species Act should be used to regulate greenhouse gases to protect the polar bear, there are some immediate things Salazar could do to push climate to the top of the agency's agenda, experts said yesterday.

Recently, current Interior Secretary Dirk Kempthorne created a climate change coordinator position within the department that hasn't yet been filled. Salazar should fill the job and empower the new employee to coordinate Interior sub-agencies' various missions and cultures in regard to global warming, said Abraham Haspel, a retired 18-year employee of the department who helped draft recent Interior [reports](#) on climate.

Interior has 'just gotten going' on climate

Additionally, Salazar should continue the work of a leadership council on climate in the department that has "just gotten going," he said, as well as funnel money to perform more analyses on how warming temperatures will transform public lands. The issue of how animals and plants are adapting is an existing problem that is going to get worse and needs more hard data, he said.

"As one example, all sorts of birds and critters in national refuges are migrating north. What happens to the refuges? Do we move them north, too?" he asked. "Right now, the department doesn't have a plan on global warming, much less an understanding of what is happening to flora and fauna."

Funding for department programs has faced a crunch in recent years, however, raising the question of where the dollars for research will come from. Passage of climate legislation that forces greenhouse gas emitters to pay for the right to pollute will be critical because of its ability to raise additional revenue, said Mark Wenzler of the National Parks Conservation Association.

The climate bill sponsored by Sens. Joe Lieberman (I-Conn.) and John Warner (R-Va.) that died on the Senate floor last summer allocated funds for specific agencies within Interior. Retaining similar allocations in any new bill will be critical, said Wenzler, adding that existing programs such as the government-sponsored "Climate Friendly Parks" program can extend their reach only so far with current revenue streams.

"National parks already are having trouble paying for basic maintenance," he said.

Vilsack's new job has many connections with climate

Vilsack, the president-elect's choice to head the Agriculture Department, is seen as an effective, centrist politician whose views on energy and rural policy are well-aligned with Obama's. Like the next president, he has been a strong advocate for corn ethanol, as well as for advanced renewable fuels and solar and wind energy.

The former two-term governor of Iowa will take the helm of a department in which many fingers are dipped in the climate pot and that is taking an increasingly central role in setting the nation's energy policy. The 2008 farm bill doubled funding for energy development, with an emphasis on grant and loan guarantee programs for advanced renewable fuels such as cellulosic ethanol.

With Vilsack's roots in corn-fueled Iowa, ethanol advocates couldn't be happier with Obama's pick. "He gets it," said industry spokesman Matt Hartwig.

Rural energy advocates, such as the 25x25 Alliance, expect Vilsack to push hard toward more advanced biofuels and to go even further to expand the agency's energy support programs, which they say historically have been underfunded and can be the first to go in times of tight budgets. Many of the nascent renewable energy industries are relying on Energy Department and Agriculture Department funding to scale up their technologies, said Ernie Shea, project coordinator for 25x25, whose mission Vilsack, along with many other politicians, has endorsed.

An advocate for farmers, however, cautioned that the agency should proceed cautiously in developing advanced biofuels, making sure they will be sustainable in the long term.

Farmers leery of advanced biofuels

"We don't want to get our legs cut out from under us in five or ten years," said Chuck Hassebrook, director of the Center for Rural Affairs in Nebraska.

Given plans for a federal economic stimulus package, promoting green jobs in the rural and forest sector will also likely end up high on Vilsack's initial agenda.

While energy is playing a more central role in the department, some observers hope that climate change is taken off the back burner.

With Vilsack at the helm, this will be likely. As head of a climate change task force at the Council on Foreign Relations, he supported a cap-and-trade system to control greenhouse gas emissions. In his brief presidential bid this election season, he went so far as to suggest that power plants should all be carbon-neutral by 2020.

And at a press conference today, Vilsack said his department "must work in concert with other federal departments, state and local governments, and the private sector to promote American leadership in response to global climate change."

Forests burning down and climate land issues that remain uncoordinated

Some have suggested that the new secretary create a department-wide position for a climate coordinator and issue an order to incorporate climate change considerations into all agency decisions, as many of the department's programs intersect with climate issues.

Lands within USDA's Conservation Reserve Program, for example, sequester 50 million tons of carbon a year. But the program has not held an open enrollment for new farmers in years, and many farmers have removed existing lands from the program.

"This administration has pretty much shut the program down over the last eight years," said Julie Sibbing, global warming and agriculture director for the National Wildlife Federation.

The department can also help develop the science for carbon offset programs on rural lands.

The Forest Service, which is within USDA and manages 193 million acres of forest system lands, must pay increasing attention to climate change as it fights raging wildfires.

"People say it's becoming a fire service rather than Forest Service," said Gerry Gray, vice president for policy at American Forests. He explained that nearly half the service's budget is directed toward emergency wildfire suppression, leaving little room for larger land management goals. He said he hopes the new Agriculture secretary will request separate funding to fight fires.

Randi Spivak, director of the American Lands Alliance, called for the Forest Service to prohibit logging of old-growth forests and to develop a comprehensive climate policy for forests that looks at the ecosystem as a whole.

Many of the broader energy and climate issues will require the new Agriculture and Interior secretaries to work closely with other departments, since they won't be able to set energy and climate policy on their own.

POLITICS: Advice from a retiring climate warrior: Give the president a 'throttle' (12/24/2008)

Christa Marshall, E&E reporter

Congress needs to give President-elect Barack Obama the power to control the rate of emissions reductions if it is to pass sweeping climate change legislation, retiring Sen. John Warner (R-Va.) said in a recent interview.

Warner, who served in the Senate 30 years and battled for greenhouse gas regulations during his final months in Congress, said lawmakers need to let the next president act as an "engineer" under any global warming bill. That way, he said in an interview with University of Michigan public policy professor Barry Rabe, the president can slow emission reduction targets if they appear too costly to business and industry.

"Give the president of the United States a throttle," Warner said, so that the White House can decide "what you move forward by way of cap and trade ... and what you hold until the economy, in the president's judgment, can meet the demands of a legislative format."

Along with Sen. Joseph Lieberman (I-Conn.), Warner co-sponsored major climate legislation that died on the Senate floor last summer. Moderate members of Warner's party will be key in determining how Capitol Hill addresses the issue in 2009 and beyond.

The idea of enhanced authority for the executive branch was encapsulated in that bill. The measure would have set up a cap-and-trade system establishing an overall lid on greenhouse gas emissions while requiring emitters to pay for the right to pollute by buying and selling allowances.

In the interview, which was broadcast as part of a climate change conference at the University of Virginia, Warner said the Bush administration killed any prospect for passage of the legislation. He also said Obama "doesn't need" his advice on the issue, considering the experience of his advisers.

Warner did argue, however, that the United States risks putting itself at a trade disadvantage unless it gets nations such as China on a parallel track in cutting emissions.

The interview was conducted before the president-elect named Carol Browner to a coordinating position in the White House on energy and climate issues. The Virginia politician said the idea of such a job was not a fully tested and proven concept in the executive branch, but added that Obama might just be the commander-in-chief to change things.

A 'bingo' moment in the woods

"I do know that president-elect manifests strong leadership," Warner said. "If he gives [someone] the title of czar, he expects [that person] to act like a czar."

On another controversial point, Warner said that the Environmental Protection Agency "should and will have" the lead on global warming policy, considering the Supreme Court decision *Massachusetts v. EPA*, which authorized the agency to regulate carbon dioxide as a pollutant under the Clean Air Act.

Obama's stated preference for addressing climate change is a cap-and-trade system similar to the one outlined in Warner's bill, although the president-elect's advisers have said they will move forward with executive branch regulation if the congressional path fails.

Sen. Barbara Boxer (D-Calif.) recently called for an increased role for EPA in the next Capitol Hill debate on the issue. She plans to introduce a "streamlined" bill that would direct the agency to set up a cap-and-trade system.

A World War II veteran and former secretary of the Navy, Warner was not the most obvious candidate to lead Congress on climate policy. He said two things directed his attention to the issue.

The first was his long-term position as chairman of the Senate Armed Services Committee, where he increasingly heard military leaders tell him behind closed doors that they were worried about warming temperatures, particularly in conflict-ridden regions like Africa. With the armed forces having intervened in countries like Somalia in the past, Warner said he worried about the possibility of climate-fed droughts and floods generating wars in regions vital to the United States.

Secondly, he returned to Idaho a few years ago to view the thick foliage he had once enjoyed as an employee of the U.S. Forest Service. To his dismay, many of the same trees among which he had worked were infested with disease and bark beetles, ant-sized insects that thrive in warm temperatures.

"I left with a broken heart" that global climate change was destroying forests, said Warner. "I said, 'Bingo, while you are still around, see what can you do.'"

Sarah J Hines
Presidential Management Fellow
USDA Forest Service, NA & NRS
Newtown Square, PA

p. 610.557.4218
shines@fs.fed.us
