

## CAP AND TRADE DIES IN SENATE

**POLITICS:** Majority leader says too few votes exist for bill putting a price on carbon

**SENATE MAJORITY LEADER** Harry M. Reid (D-Nev.) last week introduced what clean energy advocates had hoped would be energy legislation that put a price on carbon. But a so-called cap-and-trade energy bill, Reid said, would garner too few votes to pass.

Instead, the bill mainly addresses the BP Gulf of Mexico oil spill. It carries just a few energy-related provisions that encourage electric and natural-gas-fueled vehicles and provide funds for residential energy-efficiency renovations.

Reid's bill would have little if any impact on greenhouse gas emissions because it both fails to put a price on carbon and lacks provisions to support development of renewable energy. The legislation is a far cry

from climate-change legislation that passed the House of Representatives a year ago or from energy provisions that had been discussed over the past year in the Senate.

"The simple matter is I did it because I had to," Reid says, referring to the introduction of the watered-down energy bill. "I couldn't get the votes to do what we wanted, which was to price carbon."

Reid has also been a big supporter of solar and wind energy, which is a growing industry in his state of Nevada, but he told reporters during a teleconference last week that a nationwide renewable energy standard could not get the 60 votes needed to clear the Senate.

Reid hopes that the oil-spill legislation he introduced will pass in the Senate before the start of the congressional recess on Aug. 9. But even that may not be possible because nearly all Republicans and a handful of Democrats oppose it.

The House has its own oil-spill-related bill, H.R. 3534, and debate was getting under way there late last week.

Both bills would remove a cap on oil-spill liability as well as require better oil-spill-response plans. They would also codify the restructuring of the new Department of Interior agency tasked with drilling oversight.

Republicans oppose the bills, arguing that the lack of a liability cap would hurt small oil drillers. They have their own draft bill, which they hope to bring to a vote on the Senate floor.—JEFF JOHNSON



Reid

COURTESY OF HARRY REID

## PLUMES STEM FROM OIL SPILL

**GEOCHEMISTRY:** BP leak is behind undersea clouds of oil, isotopic analyses indicate

*A NASA satellite image of the Gulf of Mexico captures a gray mass of oil, which resembles a swan, from the Deepwater Horizon spill.*

**NEW RESEARCH** that has not yet been submitted for publication in a peer-reviewed journal provides definitive evidence that giant plumes of oil lurking undersea in the Gulf of Mexico have been produced during BP's Deepwater Horizon oil disaster, a group of university scientists announced on July 23. On the same day, government scientists confirmed the location and extent of the plumes.

Despite the oil company's repeated denials that the spill caused underwater plumes, scientists at the University of South Florida (USF) reported that isotopic comparisons of the undersea plume oil with samples from BP prove that the oil came from the same source. The plumes represent a great hazard for marine life because the toxic oil takes the form of microscopic, easily ingestible droplets.

"What we have learned completely

changes the idea of what an oil spill is," David Hollander, the USF chemical oceanography professor whose lab performed the isotopic analysis, said in a press release. "It has gone from a two-dimensional disaster to a three-dimensional catastrophe." USF spokeswoman Vickie Chachere added that the researchers are preparing to submit their report for publication.

The group used a method known as compound-specific isotope analysis. The carbon-isotope ratios of hydrocarbons in oil give unique signatures related to the compounds' source and history. The USF analysis was made possible after BP agreed to provide samples of oil from the well for comparison.

Christopher T. Yarnes, an engineer at the University of California, Davis, Stable Isotope Facility, notes that compound-specific isotope analysis is a useful method for comparing the sources of geochemical samples. However, he says, the accuracy of the method "depends on knowing variations between sites and depths."

Also on July 23, the National Oceanographic & Atmospheric Administration released a peer-reviewed report detailing the location and size of the plumes.

Using fluorescence spectroscopy, which detects organic substances, NOAA researchers found evidence of oil in water at more than 200 stations within a few dozen miles of the Deepwater Horizon well. Their results show that the plumes are between 3,300 and 4,300 feet deep. In these same areas, the group also found reduced levels of dissolved oxygen, which is vital for marine organisms.—ELIZABETH WILSON



NASA