

Budget backs search for cleaner energy

By Ian Hoffman, Staff Writer

Tri-Valley Herald, Tues., Feb. 7, 2006

As promised last week, President Bush's \$2.77 trillion budget doubles spending on solar and biofuels research, throwing down a challenge to scientists who said lack of money stood between them and revolutionary discoveries.

The president is asking twice as much - a quarter-billion dollars - for launching the nation back into spent nuclear fuel reprocessing, abandoned in 1970 for fear of spreading access to nuclear weapons materials, to pave the way for a U.S. nuclear renaissance.

Together, the twin initiatives arise from mounting oil prices, the risk of global warming and U.S. worries about sending millions of its energy dollars overseas to sustain nations that host terrorist groups.

At home, the money is intended to redouble scientists' efforts to make more energy available without adding to greenhouse gases that trap heat in the atmosphere.

Energy Secretary Samuel Bodman said Monday that the research will someday change the way we power our homes and our automobiles, and will help substantially reduce Americas dependence on foreign energy sources.

While a leading institution in the field, the National Renewable Energy Laboratory in Colorado, is laying off solar and biomass researchers, other researchers are preparing to vie for the new cash and harness the energy of the sun through solar cells and plant-based fuels.

Lawrence Berkeley lab, located in the hills above the University of California, Berkeley campus, is pushing for some of its top scientists to work on new kinds of solar cells, new plants and new microbes to turn the cellulose or structural material in those plants into fuel.

Berkeley lab chief and Nobel laureate Steve Chu is polishing this proposal, called Helios, for presentation next month to the Energy Department.

"We have to develop sources of energy to keep the economy prosperous," he said Monday night. "We can do much more to make (solar energy and plant-based fuels) much more efficient, to capture more of the sunlight and to capture more of the cellulose. We can do a lot, and I think we should, and we have to have another clear-eyed look at fission energy."

At Stanford University, biology professor Chris Summerville is exploring how cellulose - some of the basic structural material of plants - is made so scientists can engineer plants to make more of it, and less of other skeletal materials that are harder to turn into fuels such as ethanol.

"All approaches are on the table at this point," said Summerville, director of the Carnegie Institutions Department of Plant Biology.

Solar scientists ramped up their lobbying for money last spring after a study for the U.S. Department of Energy showed that nanotechnology - the manipulation of matter at the level of atoms and molecules - and biotechnology had opened new doors to tapping the power of the sun.

Given enough money, they told the Energy Department, researchers could break radical new ground in solar power and biofuels in perhaps five to 10 years or double the usual pace of technological progress in the field.

Energy Department officials carried that idea to the White House. The president's spending request, if it is sustained over several years, calls their bluff. Bush touted with gasoline within six years.

"I'm excited about ethanol," Bush said. "Now, we've been making ethanol out of corn mainly. But now we've got a chance, with breakthroughs in research and development, new technologies to make ethanol out of switch grass or wood products or weeds. And we're close."

The new solar and biofuels money came at the cost of cuts in geothermal energy research, energy efficiency and funding for insulating homes, among other things. In the end, the president made those choices, Bodman said.

"We believe that we can more effectively put money to work in developing the cellulosic-based ethanol program, for example, or solar energy, than in working on geothermal programs," Bodman said. "These are tough choices, I guess you would say."

The president's energy spending falls well short of what Congress envisioned in the Energy Policy Act passed last year, which has double the funding in 2007 for renewable energy and almost four times as much as the president proposes for hydrogen energy and insulating homes.

Little of the new energy money is showing up yet in the spending requests for federal labs in California. The president's proposal would allow some growth in their budgets, with about a 2.6 percent rise in Lawrence Livermore labs budget to \$1.24 billion and a 12.3 percent rise in Lawrence Berkeley's budget to \$421 million. Much of the new money at Berkeley lab is for dismantling the famed but defunct Bevatron accelerator and shoring up buildings against earthquakes. The rest is scattered in projects for containing the spread of nuclear materials, designing more energy-efficient buildings and stowing carbon dioxide in underground formations. For the gamble on new solar cells and biofuels to pay off, scientists say the new research money cant be a one-time investment.

"I would say it's a step in the right direction. The key is how it's administered and whether it's sustained," said Stanford's Summerville. "Certainly for the next 15 years were going to need it sustained."

Berkeley lab's Chu said the government shouldn't change gears now that leading scientists are devoting themselves to new, carbon-free energy sources.

"It' like starting a project to go to the moon and two years later saying, 'No, we weren't serious about it,'" he said. "It's not only this administration. It's the succeeding administrations that have to buy into this. Ultimately, it's the American public."

Smoke inhalation and its dangers

By BLYTHE BERNHARD

The Orange County Register, Tuesday, February 7, 2006

Q: What are the health effects of breathing smoke?

A: Microscopic particles of organic matter in the smoke can enter your eyes and lungs and cause irritation. Symptoms include red, itchy eyes, runny noses and scratchy throats. In rare cases the symptoms can lead to pneumonia or bronchitis.

"Shrub fires tend to put up a lot of soot into the air and that can be quite irritative," said Dr. Devang Savani, a pulmonologist at Western Medical Center in Santa Ana.

Q: Who is most at risk?

A: Seniors, children and people with chronic heart or lung disease. The smoke can aggravate medical conditions such as asthma and emphysema. Allergies can also be exacerbated. Children can experience breathing problems because their lungs are still developing.

Q: How concerned should people be?

A: The smoke, while irritating, does not pose a serious threat to most healthy people.

Q: Are hospitals seeing an increase in patients?

A: Emergency room visits at Western Medical more than doubled Monday, Savani said. "People are unfortunately having a lot of respiratory problems," he said. UCI and Anaheim Memorial reported no increases.

Q: What can I do to avoid breathing the smoke?

A: In the car: Keep your car windows and air vents closed. Operate the air conditioner only on the "recirculate" function.

At home: Close all windows, doors, and fireplaces. Use the air conditioner on the recirculate setting. Air purifiers also can be helpful. Try to avoid using anything that burns - including gas stoves, fireplaces and candles. Don't vacuum, which can stir up dust and make the air worse.

Outside: Avoid outdoor activity and exercise if possible. A damp cloth covering your mouth can help filter the particles.

Q: What if I have asthma?

A: Monitor your peak flow, a measure of lung function, and call your doctor if the level drops.

Q: When should I contact a doctor?

A: If you experience shortness of breath, wheezing, lightheadedness or chest pain.

Q: How long will the smoke last?

A: Depending on wind conditions, the smoke can remain in the air for days. Symptoms can start as long as two days after the first exposure to smoke.

Q: Who can I call for more information?

A: The county's fire information line at (714) 628-7085.

Source: Orange County Health Care Agency, California Air Pollution Control Officers Association

News from the San Joaquin Valley

S.F. Chronicle, Tuesday, February 7, 2006

Fresno, Calif. (AP) -- New and expanding dairies that plan to add thousands of animals to their operations have prompted Fresno County officials to consider environmental screenings for large dairies.

The county is the only one in the San Joaquin Valley without a screening process for new dairies that create tons of manure and air pollution.

The county officials didn't feel the need for such screenings in the past because it didn't have as many cows as other counties. Fresno still hasn't surpassed Tulare County but dairies this year plan to add about 50,000 more animals to the existing 185,000.

Under state law, the San Joaquin Valley Air Pollution Control District conducts environmental screening for large dairies in the region.

Local government officials would be more appropriate than the air board to look at how dairies in their county affect water quality, endangered species, traffic and other concerns, said David Crow, executive director of the regional air district.

Wildfire smoke can be harmful

Here are some tips for diminishing the hazard.

The Orange County Register, Monday, February 6, 2006

Smoke from the wildfires near Anaheim Hills can pose a health threat to seniors, children and people with certain medical conditions, the Orange County Health Care Agency announced today.

"Among those who can be most directly affected by smoke exposure are individuals with heart and respiratory diseases, older adults, children and pregnant women," said Dr. Hildy Meyers, acting county health officer. "Air pollution levels from the fire can change rapidly, depending on weather conditions, so we recommend that individuals in these high-risk groups take precautions until the situation is over."

Broadly speaking, here are some tips from the American Lung Association on how to reduce the health hazards:

- If you are in a fire-stricken area, stay indoors and avoid breathing smoke, ashes and particulates.
- Don't exercise outdoors; particularly if you smell smoke or notice eye or throat irritation.
- When driving, keep your windows and air vents closed. Air conditioning should be operated in the "recirculate" setting.
- People with respiratory problems, including asthma, emphysema and bronchitis, who live in immediate and surrounding areas of fires should stay indoors as much as possible.
- If outdoor trips in smoky areas are necessary, breathe through a damp cloth.
- People with asthma should be sure to have medication(s) (pills, inhalers) available in case of asthma attacks; they also should consult their physicians to determine appropriate dosages for asthma prevention.
- People using oxygen should not adjust their level of intake before consulting their physicians.
- If pulmonary symptoms are not relieved by usual medicines, seek medical attention. Symptoms to watch for are: wheezing; shortness of breath; difficulty taking a full breath; chest heaviness; light headedness and dizziness.
- If you develop a persistent cough, or difficulty breathing, contact your physician. Symptoms can show up 48 hours after exposure.

- People with lung or heart problems should avoid clean-up activities and areas where dust or soot is present.
- If you think asbestos or other hazardous materials have been burned or disturbed in a fire, don't work in that area. Dust masks do not protect against asbestos.

Canners oppose limits on waste

'Organic recycling' a benefit, not threat, Signature Fruit says

By JOHN HOLLAND - BEE STAFF WRITER

Modesto Bee, Saturday, Feb. 4, 2006

Leaders in food processing asked for help Friday in fighting possible restrictions on the spreading of their waste on farms in Stanislaus County.

The limits, proposed by regional water regulators, could increase the cost of operating canneries, speakers said at a summit on agricultural issues at Tenth Street Place in downtown Modesto.

They said the environment is not harmed when peach pits, tomato skins, almond hulls and other residues are used to enrich soil.

"What we are doing is recycling organic material," said Dave Wissing, director of environmental affairs for Signature Fruit Co. in Modesto.

The Central Valley Regional Water Quality Control Board is scheduled to consider the practice at its March 16-17 meeting. The board's staff has raised concerns about odors and the potential for salts and nitrates to seep into groundwater.

Critics said the possible new requirements, such as drilling wells to monitor the water, could make land application too expensive. It has been done for more than 20 years.

"There simply is no justification to create any regulatory scheme where food-processing byproducts would be regarded as industrial waste," said Dave Withycombe, a senior vice president for Del Monte Foods, which has a fruit cannery in Modesto.

After the summit, he and Wissing declined to say how limits on land disposal might affect production at the canneries. They employ several thousand people at the peak of the summer canning season.

The summit, which drew about 130 people, was hosted by state Sen. Jeff Denham, R-Merced, and Assemblyman Dave Cogdill, R-Modesto. It included A.G. Kawamura, secretary of the California Department of Food and Agriculture.

County Supervisor Jeff Grover said the food waste — about 600 million pounds a year — is spread in such a way that crops make use of all of the nitrogen and other elements in the waste.

"The concern that we have is that these decisions are not being made with good, sound science," Grover said.

Cannery representatives said the waste is barred from many landfills because of its high water content. They said it might be shipped to a distant dump without such a ban, but the cost would be high.

Cogdill and Denham, who serve on the agriculture committees in their respective chambers, said they would help round up support for continued spreading in the county.

Other summit topics:

The shortage of farmworkers is the worst since the 1950s, said Manuel Cunha, president of the Nisei Farmers League in Fresno. He urged support for federal legislation that would ease restrictions on foreign workers.

Rules aimed at protecting air and water continue to burden growers, several speakers said. Cunha said he feared that "no-farm days" might someday be declared to prevent pollution.

"Can you imagine telling a cow, 'Sorry, honey, we can't milk you for 48 hours,'" he asked.

Dairy farmers got "reasonably good" prices for their milk in the past two years, said Ray Souza, a dairyman west of Turlock. He said regulation, foreign subsidies and the high cost of labor, energy and feed are difficulties facing the industry.

Souza said competition for funding will be fierce as Congress takes up a new farm bill, but programs that help farmers protect the environment should be preserved.

Theft in rural areas continues to be a problem, especially of fuel, metals and beehives, sheriff's Deputy Donnie Schwandt said. He added that illegal dumping might be curbed by newly enacted penalties, including a \$250 minimum fine and towing of offenders' vehicles.

Kawamura talked about efforts to protect the state from avian flu, other diseases and pests introduced to California from outside the state. He also said California has potential for producing energy from manure, plants and other farm sources.

"Some of the achievements we have here are steppingstones for the agricultural infrastructure of the rest of the world," he said.

Cindy Lashbrook, a farmer in the Livingston area, said development is spreading too fast in the San Joaquin Valley.

"We need to help make farming viable again so that our kids want to go into it and follow us onto the land," she said.

[Bakersfield Californian, Letter to the Editor, Tuesday, Feb. 7, 2006](#)

Law unfair to teens

A new law was passed saying that if you are a teen and have not had your license for over one year as of Jan.1, 2006, you cannot drive with passengers until you've had it for a year.

This law doesn't apply to me since I am 17 years old, but it applies to a lot of my friends.

I don't understand how this law is supposed to help. There is already too much traffic in the first place. Now there will be so much more because everyone will have to be driving by themselves.

Everyone is always saying to carpool because of the pollution in the air, but yet we're putting more cars out on the road.

I would like that to be explained to me. I just don't think that it's fair.

It seems like every year we are getting more and more things taken away from us just because we are teenagers.

Everyone will either be or has been a teenager and you know how hard that is, but we just keep getting punished. This law doesn't even apply to me, but I think it is an ignorant law.

-- BRITTANIE GEIGER, Bakersfield