

## **New UPS electric fleet touted as clean-air boost**

By Darrell Smith

Modesto Bee and Sacramento Bee, Wed., Feb. 6, 2013

Brown is going green.

United Postal Service's trademark brown vans will be joined by 100 fully electric vehicles in what is being touted as the largest rollout of zero-emissions, all-electric delivery vehicles in California.

UPS debuted its electric fleet in a Tuesday morning ceremony at its Shore Street distribution center in West Sacramento. Built in Stockton, the trucks will cover routes in Sacramento, Ceres, Fresno, Bakersfield and San Bernardino.

UPS expects the trucks to reduce fuel consumption by 126,000 gallons a year and to lower carbon emissions.

"Climate change is not waiting. Pollution doesn't wait, so we can't wait, either," Gov. Jerry Brown said, flanked by a handful of UPS drivers, executives and state environmental officials at the ceremony.

The trucks are part of a larger objective put in motion by a Gov. Brown-signed executive order to put some 1.5 million zero-emissions vehicles – or roughly the number of fossil fuel-burning trucks on California roads and highways – onto the state's roadways by 2025.

State alternative fuel and technology funding is giving the growing sector a boost – some \$90 million is slated to be invested this fiscal year on alternative and renewable fuels technology, said California Energy Commission officials.

Brown's order also calls for infrastructure to support 1 million zero-emissions vehicles by 2025.

Brown recalled Silicon Valley innovators Steve Jobs and Steve Wozniak of Apple at the ceremony calling California a "dynamic center of innovation, of imagination, technology and collaboration" and said climate change demands that the state develop a robust clean-energy transportation sector.

UPS' zero-emissions fleet in California is a fraction of the more than 2,500 alternative-fuel vehicles it operates worldwide, but one federal Environmental Protection Agency official said that UPS' rolling electric laboratory is a significant early step toward a cleaner California.

"We're committed to a future that is more electric than diesel. This really is the future," said Jared Blumenfeld, EPA regional administrator. "Not only are we cleaning the air, but employing about 60 people. It's a market that makes sense."

The vehicles' manufacturer, Electric Vehicles International, or EVI, moved its operations from Toluca, Mexico, to Stockton in 2009, lured by California's push for vehicles powered by clean energy.

In August 2011, UPS ordered the 100 EVI-built trucks that make up the fleet.

EVI's goal is simple, said the firm's Sheree Robinson. "Produce clean air and help the environment," Robinson said.

The EVI rigs, costing about \$150,000, are more expensive than the roughly \$50,000 for UPS' diesel trucks, but the electric trucks are less expensive to operate than their diesel counterparts, said Guadalupe Arredondo, an EVI applications engineer.

"It's less expensive, not only when you compare kilowatt-hours to the price of fuel, but also in maintenance costs," Arredondo said.

The electric vehicles also feature energy-saving and energy-generating twists.

One, a regenerative braking system, stores and recycles the energy generated when a driver applies the brakes. The energy goes back into the vehicle's battery, Arredondo said.

"It reduces our carbon footprint, and maintenance costs go down," he said.

With their 75-mile range, the electric vehicles are ideal for urban UPS routes, and the trucks' electric power plant has other bonuses, too, said driver Joe Thomas, a 29-year UPS veteran.

However, Thomas said, customers may miss the big brown vans' distinctive diesel rumble.

"They're very quiet, like a Prius," Thomas said with a small laugh. "You don't know if they're running. It's easier on the ears."

## **Governor Brown Celebrates the Deployment of 100 Zero-Emission, California-made Delivery Vehicles**

By Electric Vehicles International

Sacramento Bee, Tues., Feb. 5, 2013

WEST SACRAMENTO, Calif.-- /PRNewswire/ -- Today Governor Brown led the celebration of UPS's deployment of 100 fully electric commercial delivery vehicles throughout California. This landmark event recognizes one of the world's largest deployments of zero-emission commercial trucks, which are cleaning the air and saving fuel costs in communities throughout the state - including San Bernardino, Ceres, Fresno, Bakersfield and Sacramento, and creating jobs here in the heart of California's Central Valley.

"These all-electric vehicles remind us that California continues to be a dynamic center of innovation," said Governor Brown. "These trucks were built here, they'll be driven here and they're already changing the way business is done here – Cutting emissions and eliminating the need for tanker trucks worth of fossil fuels."

"Electric Vehicles International (EVI) is proud to partner with UPS on this landmark deployment of California-made zero emission package cars," said Ricky Hanna, CEO of EVI. "EVI is honored to be a part of UPS's fleet, which is advancing state-of-the-art logistics in California and around the world."

This partnership is a significant first step in supporting Governor Brown's Executive Order for widespread deployment of zero-emission vehicles throughout California," continued Hanna. "We would like to recognize the hard work and genuine partnership of the California Energy Commission, California Air Resources Board, the US Environmental Protection Agency (EPA) West Coast Collaborative, San Joaquin Valley Air Pollution Control District, the South Coast Air Quality Management District (AQMD), and the Sacramento AQMD. Without the initial spark provided by our public and private partners, this landmark zero-emission truck deployment would not have happened here in California."

Partners in Advancing Transportation and Cleaning the Air:

California Energy Commission:

"These vehicles are an example of how California is using vision, collaboration and ingenuity to lead the way on clean transportation," said California Energy Commissioner Robert B. Weisenmiller. "Two years ago, the Energy Commission awarded crucial seed funding for the Air Resources Board program that helped put these clean, emission-free vehicles into service today, and will put many more on the road in future years. By reducing greenhouse gas emissions, these investments protect the environment and the health of all Californians."

California Air Resources Board:

"California's hybrid-vehicle incentive program is helping put more of the very cleanest short-haul delivery trucks onto the roads and into the communities where they are most needed," said Air Resources Board chairman Mary D. Nichols. "Assisting large fleets like UPS with the initial cost of these trucks helps move the cleanest technologies to market sooner, and advances California's clean air standards and climate change goals."

San Joaquin Valley Air Pollution Control District

"We are enthusiastic about technologies such as this, which are critical in not only meeting our significant air-quality challenges but also in supporting the Valley's economy," said Seyed

Sadredin, executive director and air pollution control officer of the San Joaquin Valley Air Pollution Control District.

US Environmental Protection Agency:

"EPA's funding of these electric delivery trucks highlights our commitment to the rapid deployment of electric vehicles as a means of cleaning the air, creating jobs and spurring innovation," said Jared Blumenfeld, EPA's Regional Administrator for the Pacific Southwest. "California's communities will benefit from both the local manufacturing of these UPS electric trucks and from the resulting elimination of harmful diesel emissions."

South Coast Air Quality Management District:

"The use of these electric delivery vans in the San Bernardino area -- one of the nation's smoggiest communities -- brings us one step closer to our goal of widespread deployment of zero-emission vehicles in the goods movement network," said William A. Burke, Ed.D., Chairman of the South Coast Air Quality Management District.

Sacramento Air Quality Management District:

Larry Greene, SMAQMD's Executive Director/APCO: "We believe this is a wonderful and innovative project. Our work with EVI and UPS has been extremely rewarding given that EVI is a California manufacturer, and the first EVI has been placed in the UPS West Sacramento facility."

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## **UC Merced Connect: Campus keeping it sustainable**

Merced Sun-Star, Wed., Feb. 6, 2013

Sometimes, what goes on behind the scenes is as important as what happens in full view -- especially when it comes to UC Merced's pledge to uphold and develop sustainable practices.

Across campus, sustainability is on the minds of hundreds of staff members who, every day, push the university closer to realizing its Triple Zero Commitment to consume zero-net energy, produce zero landfill waste and produce zero-net greenhouse gas emissions by 2020.

Sustainability is the guiding principle in campus design, planning and operations. UC Merced is the only university in the country where all of its buildings are LEED certified.

UC Merced has a 1-megawatt solar array that helps power the campus, and the Central Plant, an iconic campus structure where water is heated or chilled during nonpeak times to warm or cool classroom and office buildings. Both provide significant savings.

Sustainability drives decisions about everything from cleaning supplies and grounds maintenance to teaching, research and how the campus purchases the thousands of supplies that keep it running.

"It all gets discussed and evaluated constantly," said Zuhair Mased, the campus director of energy and sustainability. "We even think about the proper locations for trash and recycling bins to offer maximum accessibility to users and to the people who empty them."

Ever wonder why UC Merced serves only Pepsi products? It's because Pepsi offered the best deal on its soda products, plus compostable cups and money for sustainability programs.

Cindi Deegan, director of purchasing, said she has negotiated sustainability benefits into supply and service contracts, including compostable cups, energy-efficient vending machines, and locally sourced food, parts and labor.

She, like many others, constantly thinks strategically about sustainable sourcing opportunities when negotiating contracts for equipment, supplies and services.

This strategic focus may include considerations such as where campus food comes from, and where, how and with what materials furniture is manufactured and even how it is transported.

"We're trying to model things that can be copied," Deegan said. She hopes UC Merced will become the systemwide model for sustainable procurement practices.

The campus community is encouraged to maintain sustainable habits and to bring ideas to facilities management.

"We partner with everyone here to create and maintain a sustainable campus," Mased said. "We can design the most energy-efficient buildings in the world, but it's up to the tenants and users to keep it going -- to be part of that legacy."

Professor to give talk on LA at film screening

Professor Ignacio López-Calvo will introduce and screen Dennis Hopper's film "Colors" at 7 p.m. today in the Classroom and Office Building, Room 286. The event is free and open to the public.

The 1988 film starring Sean Penn and Robert Duvall is an intricate panorama of Los Angeles gangs and police who try to control them.

López-Calvo's introductory talk is titled, "The Other Forgotten Landscapes and Cityscapes of California: The Los Angeles Mexican American Barrio."

For further information, contact Tom Hothem at [thothem@ucmerced.edu](mailto:thothem@ucmerced.edu) or (209) 217-7247.

## **Air pollution linked to low birth weight**

By Stephanie M. Lee, staff writer

S.F. Chronicle, Wed., Feb. 6, 2013

Mothers who breathe the kind of pollution emitted by vehicles, coal power plants and factories are significantly likelier to give birth to underweight children than mothers living in less polluted areas, according to international findings published Wednesday.

The study is believed to be the largest to examine how newborns' bodies are affected by air quality, an issue that has raised particular concern in China and other developing nations.

Nearly 30 researchers, including three from the Bay Area, based their conclusions on more than 3 million births at 14 sites in North America, South America, Europe, Asia and Australia.

Focusing on children born on-time in the mid-1990s to mid-2000s, they found that, worldwide, the greater the air pollution, the less babies tend to weigh at birth.

### **Chronic health issues**

Weighing less than 5.5 pounds at birth is a factor for chronic health issues in childhood, including a higher risk for infection and developmental delays, experts say. Problems in adulthood can include cardiovascular disease, diabetes and other metabolic disorders.

"Being low birth weight basically is like you're starting at a little bit of disadvantage in terms of health throughout your lifetime," said Tracey Woodruff, the study's co-principal investigator and director of UCSF's Program on Reproductive Health and the Environment.

For the study, which appears in the journal *Environmental Health Perspectives*, researchers looked at two types of air pollutants, including inhalable coarse particles, which are about 10 micrometers in diameter and often appear in natural elements such as dirt, dust and sea salt.

### **Levels from 14 sites**

The particles were found in various levels throughout the 14 sites. Seoul's air had the highest concentration, 66.5 micrograms per cubic meter, while Vancouver's had the lowest, 12.5 micrograms per cubic meter.

In the United States, California's levels - about 29 micrograms per cubic meter - exceeded those of Connecticut, Massachusetts, New Jersey and Atlanta. But the Golden State fared better than urban regions in Brazil, Italy and the Netherlands, where concentrations were in the 40s.

"It's all relative in terms of how you decide how bad California is," said Rachel Morello-Frosch, a UC Berkeley professor of environmental science, policy and management and public health. She and UC Berkeley researcher Bill Jessdale analyzed 1.7 million California births for the study.

The research showed that infants' risk of having a low birth weight rose by 3 percent with every increase of 10 micrograms per cubic meter in inhalable coarse particles. Overall, with each increase, infants were born 3 grams lighter.

When the study factored in individual variables, such as the mother's age and tobacco use, the average weight drop tripled to 9 grams.

### **Fine particles' strong effect**

The effect appeared to be even more dramatic with another type of air pollutant, fine particles. These are 2.5 micrometers in diameter and can come from forest fires, power plants, factories and cars.

For each increase in fine particles by 10 micrograms per cubic meter, there was a 10 percent higher chance that newborns had a low birth weight when individual variables were taken into account, the researchers said.

Air pollution may have a small impact on an individual mother and her child. But in a large population, it could lead to a significant increase in the number of low-birth-weight babies, Morello-Frosch said.

In the United States, the yearly average concentration of fine particles in the air must be no more than 12 micrograms per cubic meter. In contrast, the European Union's limit is twice as high - 25 micrograms per cubic meter - and regulatory agencies are considering lowering it.

### **Push for regulation**

The onus is on policymakers, not on mothers, to improve conditions, researchers said.

"This really speaks to the need for regulatory action to ensure that air pollution levels are consistently regulated at levels that protect public health and, in particular, protect prenatal and perinatal health," Morello-Frosch said.

The study's message resonates in light of the air-quality crisis in Beijing, where the density of fine particles has reached extremely hazardous levels, said Beate Ritz, a UCLA epidemiologist who has studied birth outcomes and air pollution in California. She was not part of the new study.

Ritz said the researchers have shown on a large scale what has until now been seen through smaller lenses: Air pollution can hurt future generations.

"Whatever impacts fetal growth and fetal development," she said, "we should really be worried about it."