

Rural rail line: What is being done?

Visalia Times-Delta and Tulare Times-Register, Saturday, Nov. 14, 2009

- A shippers association has been formed to represent business interests along the rail lines.
- Public-private partnership opportunities are currently being explored.
- Potential funding sources are being identified such as grants from the San Joaquin Valley Air Pollution Control District, state and federal programs.

Measure R

- \$3 million of Measure R funding from the transit/bicycle/environmental category has been approved to help preserve rail corridors in Tulare County.

A total of \$91 million, or 14 percent of projected revenue over the 30-year life of Measure R, is reserved for transit, rail and alternative transportation.

- The use of Measure R funds for rail doesn't take any funding from local street and road projects or regional road projects.
- A more efficient and better-used rail system will reduce truck impacts on our roads, thereby reducing road maintenance needs, which will make Measure R funding for local streets and roads stretch further.

TCAG intends to seek approval from cities in the county to commit an additional \$1 million to buy the rails and ties on the Strathmore-Jovista line.

The American Recovery and Reinvestment Act of 2009 offers more than \$48 billion for transportation nationwide, including freight and passenger rail.

Examples of success

Ventura County: Total project cost \$8.7 million

- \$4.2 million from federal Surface Transportation Fund
- \$3.5 million from federal Transportation Enhancement funds
- \$1 million from the city of Ventura

The San Joaquin Valley Railroad Cross-Valley Rail Corridor

- State/federal/air district grants: \$11.3 million
- Private funds: \$2.7 million
- City match, Lemoore and Visalia: \$253,000
- Total: \$14,253,000

Opportunity for the Valley

The county has the opportunity to re-create the 300-mile rail line from the Port of Oakland to Bakersfield. We have gaps that must be filled at the Altamont Pass, Los Banos and near Richgrove, just north of Bakersfield. We must prevent the abandonment locally, and work regionally, for rail service in the Valley to be viable.

UC Merced uses sun to go green

By Alex Cantatore, Civic Desk

Turlock Journal, Friday, November 13, 2009

The University of California, Merced welcomed a new 8.5-acre, 1-megawatt solar array this week. Almost 5,000 solar panels will track the sun to provide 20 percent of the campus' annual electricity needs, rising to two-thirds of the campus' energy on sunny summer days.

UC Merced officials say the array will save \$5 million over the next 20 years. Additionally, more than 45 million pounds of carbon dioxide will be removed from the air over the next 30 years, equivalent to removing 3,600 cars from the roads.

The new solar array was spurred by UC Merced's "Triple Zero Commitment" to save as much energy as possible, generate as much renewable power as is used, and to offset greenhouse gas emissions by 2020.

Landfill tech accused of falsifying records

By Kristina Davis

San Diego Union-Tribune, Friday, Nov. 13, 2009

SAN DIEGO — Federal charges have been filed against a former contractor for the county Department of Public Works who is accused of failing to inspect landfill gas emissions and then entering false data as though he did the work, the U.S. Attorney's Office said Friday.

Atticus Gee, 33, of Oceanside, was employed as a technician from 2004 to 2007 and was responsible for tracking gas emissions of closed landfills around the county, including ones in San Marcos, Carlsbad, Bonsall and Encinitas.

Prosecutors say instead of doing the inspections, Gee prepared false reports by copying data already in his computer database into the new reports.

He was arraigned in U.S. District Court in San Diego Friday on charges of making false statements, mail fraud and tampering with a monitoring method. His bail was set at \$10,000.

When landfills reach capacity and are closed, methane gas vents are required to be installed to release gasses and prevent underground fires. The gas emissions are regulated by the San Diego County Air Pollution Control District.

Authorities became suspicious when an underground fire was discovered at the Palomar Airport landfill in September 2005, even though no unusual readings had been reported in the monitoring data, the U.S. Attorney's Office said.

If convicted, Gee could serve up to two years in prison and/or pay up to a \$250,000 fine.

Using Celebrity Wattage to Fight City's Planned 'Garbage Garage'

By Joseph Berger, staff writer

N.Y. Times, Sunday, Nov. 15, 2009

In the old days, the industrial neighborhood just above TriBeCa was so forlorn that if Martin Sheridan spied someone four blocks away, he

"I knew they'd be coming here," said Mr. Sheridan, the silver-haired owner of the Ear Inn on Spring Street. "There was nowhere else to go."

But for at least three decades now, with less fanfare than accompanied TriBeCa's renaissance, the factory lofts have been increasingly occupied by artists and Wall Street executives. Now many of these residents — including actors like James Gandolfini, Ben Affleck, Jennifer Connelly and John Slattery — feel they are being visited by a ghost of the neighborhood's past.

The city is planning to put up a 138-foot tall garage for 95 sanitation trucks on a two-block-long United Parcel Service parking lot. It would cost more than \$500 million, and construction is slated to start as early as spring.

The plan would consolidate the garbage trucks serving three Manhattan community boards into a single building on Spring Street between the West Side Highway and Washington Street.

What gives the dispute a dimension that other not-in-my-backyard fights lack is that the opponents have spent more than \$50,000 staging a competition to have architects draw up

alternatives. The winner is a sleeker, cheaper 70-foot-tall building that would consolidate 62 garbage trucks from two community boards instead of three. The building, called Hudson Rise, would include a rooftop park that would connect by way of a highway pedestrian bridge to a planned Hudson River park atop Pier 40.

"We're no Nimbys," said Jana Haimsohn, a performance artist and neighborhood advocate. "Always in our dealings we look at the needs of the broader community."

The other twist is the wattage of the celebrities involved. Mr. Slattery, who plays debonair Roger Sterling in the Emmy-winning series "Mad Men," but in this neighborhood is as much the father of a 10-year-old soccer player, Harry, thinks the city's plan is misguided and has appeared at public hearings to say so. He does not think involvement of people like him smacks of too much calculation.

"If that's what it takes — people in TV and the movies — to get people to pay attention, then it's a good use of that celebrity," Mr. Slattery said.

The opponents have filed a lawsuit in New York State Supreme Court, based largely on issues like whether the community is being asked to take more than its fair share of garbage trucks. But their principal strategy seems to be to persuade politicians, community boards and the news media that their scaled-down blueprint is preferable to the city plan.

The opponents call the so-called garbage garage a "Stalinist" colossus and say its presence would add more diesel fumes to air already polluted by Holland Tunnel traffic. It would also amplify the urban clamor, block river views and reindustrialize a neighborhood that was gently becoming residential, they say. Across the street from the building, the city is planning to erect a companion shed to hold at least 4,000 tons of road salt that opponents say would leach into roots of nearby trees and into the Hudson River.

The city, proudly defending what it says is a congenial design that won approval by the City Council and the city's Public Design Commission, argues that it has no choice. Under a 2005 settlement with Friends of Hudson River Park, it has until 2013 to move garbage trucks serving three community boards off an eight-acre peninsula on the Hudson River at Gansevoort Street. The only practical place to consolidate them would be the garage on Spring Street, it says.

Matthew Lipani, a spokesman for the Department of Sanitation, said in an e-mailed statement that the alternative proposed by community groups would require finding and acquiring another site for a garage for the trucks serving the third community board — a Midtown district between 59th and 14th Streets. That would delay vacating Gansevoort and end up costing more than the city's proposal, he said.

Garbage installations are never popular, and the city has tried to get roughly one garage for every one of its 59 community boards. But high real estate prices and scarce properties in Manhattan often require bundling garages for several communities.

In various documents, the city contends that the addition of garbage trucks near the entrance to the Holland Tunnel and the West Side Highway would have a negligible impact on noise and air pollution and that its garbage trucks would be low-emission models that meet federal exhaust standards.

The opponents say city agencies are too slow to change, even when offered better proposals.

"The Department of Sanitation is like an ocean liner," said Richard Barrett, a painter and leader of the TriBeCa Community Association fighting the city's garage. "Once they're set on a course, it's nearly impossible to make a quick turn."

An irony that opponents see in the controversy is that Spring Street was chosen as a result of a settlement with an ally — Friends of Hudson River Park — that required garbage trucks and a salt shed to be taken off the Gansevoort peninsula so that site could be converted into another link in the archipelago-like river park.

The opponents have tried to propose other sites for the trucks of that third district, the Midtown community board, including a riverside space at 29th Street that was originally condemned. That site has since been acquired by Joseph B. Rose, a former chairman of the City Planning Commission, who wants to build a 66-story hotel there.

The area east of the garage, sometimes called the South Village or West SoHo but increasingly known as Hudson Square, was once chockablock with printing and storage firms. In 2003, the city recognized its increasingly residential character by rezoning the area to accommodate dwellings. Ten new apartment buildings have been built, including a Philip Johnson creation called the Urban Glass House, where condos go for more than \$2 million. Its river views would be obscured by the city's proposed garage.

The opponents have not been able to gain much traction among politicians, with the defeated mayoral candidate, William C. Thompson Jr., their most prominent backer. They have not had much success with the Bloomberg administration, though there have been recent meetings with Edward Skyler, the deputy mayor for operations.

"We couldn't get an entree into the mayor's office until Gandolfini got involved, and suddenly the door was open," Mr. Barrett said.

North Dakota flaring less natural gas _ for now

By James MacPherson - Associated Press Writer

In the Modesto Bee, Merced Sun-Star, and other papers, Sunday, November 15, 2009

BISMARCK, N.D. -- The burning glow over North Dakota's oil patch is slowly dimming as companies work to capture and sell natural gas instead of flaring it.

Though the flares atop the oil fields have lessened in recent months, it's still tough to stomach for those in North Dakota who question rising heating bills in the light of the huge hissing flames that burn natural gas as waste.

"I've heard comments here and there that it's too bad all that gas is going to waste," said Greg Armitage, who runs the Hilltop Home of Comfort nursing home in Killdeer, a western North Dakota town of about 700 in the heart of the state's oil fields.

A year ago, almost one-third of natural gas that came to the surface in North Dakota went up in smoke as an unmarketable byproduct of oil production. The 26 billion cubic feet of natural gas that billowed flames and smoke from scores of oil wells was about twice the annual gas consumption of the state.

More than \$350 million in infrastructure improvements are either planned or under way in North Dakota to capture natural gas and move it to market, said Justin Kringstad, director of the state Pipeline Authority.

"It's being captured for economic reasons as well as for the environment," Kringstad said. "There are several things pushing these investments and each is equally important."

State and industry officials say the amount of gas flared has decreased from 25 percent of total production to 11 percent in the past few months as the capacity has increased at processing plants in the state and as pipelines are being built.

Wayde Schafer, a North Dakota spokesman for the Sierra Club, said any level of wasted energy is unacceptable.

"It was absolutely horrible," Schafer said of the amount of natural gas flared in 2008. "Now it's just terribly horrible."

"I think it's pretty hard to justify wasting a fuel source," Schafer said. "We're still getting the pollution without the benefit of the energy."

Flaring natural gas creates carbon dioxide emissions blamed for global warming.

Jim Semerad, manager of permitting and compliance for the state Health Department, said the flare emissions in the state's oil patch are within acceptable air quality guidelines. Still, he said, "just because they meet air quality standards doesn't mean we're happy with the wasted fuel."

Beyond air quality standards, there are no laws to discourage flaring in North Dakota, he said.

"The waste issue is off our regulatory ability," Semerad said. "We can't mandate it."

The U.S. Energy Department's Energy Information Administration says less than 1 percent of natural gas is flared from oil fields nationwide, and less than 3 percent worldwide.

"The goal is to get North Dakota down to the national average, or lower," Kringstad said. He's not sure when that might happen.

"The challenge is keeping up with new wells coming on line," Kringstad said.

The problem of unwanted natural gas comes from the success of the state's oil patch, which government scientists say is home to the largest continuous crude accumulation they've assessed. Improved horizontal drilling technology in the rich Bakken shale and Three Forks-Sanish formations has led to record crude production in the state, elevating it to the fourth-largest oil-producing state in the nation, leapfrogging from ninth since 2006.

Ron Ness, president of the North Dakota Petroleum Council, a Bismarck-based group that represents about 160 companies, said record oil production meant the same for natural gas.

"It was more than our plants could handle," Ness said.

The gas is only valuable if it can be moved to market, he said.

"We're seen infrastructure being put in place as rapidly as possible," Ness said. "Nobody - not the least of which the operator - wants to flare it."

A rush to develop the North Dakota's rich oil patch amid record prices resulted in billions of cubic feet of wasted natural gas that could have heated every home in the notoriously frigid state through at least two winters.

"Haste makes waste," said the Sierra Club's Schafer, one of less than a handful of professional environmentalists in North Dakota. "We just go crazy and we don't do it right. We could be protecting ourselves and we should be."

North Dakota crude also continues to lack the pipelines needed to move it to market, but it is hauled by truck or rail rather than wasted.

The state is on track to set record oil and gas production this year and next, industry and state officials say.

Short of a crash in oil prices, an inordinate amount of gas flaring appears to be a reality in North Dakota until infrastructure can keep pace with oil production.

Said Kringstad: "As long as rigs stay in North Dakota, we're always going to be chasing that goal of reduced flaring."

DOE's Steven Chalk: Managing Billions of Dollars in Clean Energy Stimulus Funding

From the Partnership for Public Service
Washington Post, Monday, Nov. 16, 2009

At the Department of Energy (DOE), Steven Chalk has experienced the economic crisis as an opportunity, a chance to push energy efficiency.

A career public servant, Chalk manages the distribution of nearly half the \$36.7 billion in economic stimulus funds Congress granted DOE this year -- money issued for home weatherization, energy efficient buildings, plug-in hybrid vehicle technology, solar, wind and geothermal power.

Chalk, the chief operating officer at DOE for energy efficiency and renewable energy, described the funding windfall as "clean energy on steroids." He said it could lead to the creation of new industries and jobs, lower pollution levels and less dependence on foreign oil.

"This is the biggest opportunity in the clean energy field in 30 years, and the best time to work at the Department of Energy," Chalk said. "We finally have the resources to make a huge difference and people will start seeing that in terms of green jobs and in homes and cars during the next five years because of the stimulus funding."

Chalk has worked to promote clean technologies and innovative approaches to the nation's energy needs for years, often against the odds and the prevailing political winds.

Now that he has the resources to make a significant impact, his job is to ensure stimulus money is properly awarded, that programs are operating according to plan and that taxpayers get the best value for their money.

He said his greatest challenge is managing a staff flooded with work generated by stimulus funds, or as he puts it, "keeping all the balls in the air at once without dropping any and getting the money out the door so it will get into the economy and work for people."

"Our motto is spend fast, but spend well," Chalk said.

Cathy Zoi, the DOE's assistant secretary for energy efficiency and renewable energy, said Chalk's knack for bringing together all of the components for a successful program is evident by his ability to work smoothly with career staff, technical people, lawyers, contractors, engineers and those of other energy specialties.

"Even when he is under pressure, he never boils over. He is supportive of the staff and knowledgeable, and knows how to get the job done," Zoi said.

After Congress approved the stimulus money last winter, Chalk was in the hospital for a back operation and Zoi said he remained entirely dedicated to his job. "Steve had a broken back in February, but he worked from his hospital bed to help us ramp up," Matt Rogers, a senior adviser at DOE concerning the stimulus spending program, called Chalk "a pragmatic problem solver." Rogers said Chalk knows what it takes to succeed in government and takes charge to get jobs done.

Chalk began his government career 26 years ago, as a civilian designing rocket motors and propellants for the Navy. He joined the DOE in 1990, working in the area of nuclear weapons before exploring solar and hydrogen efficiency programs, among other renewable energy initiatives.

During the Bush administration, Chalk served as deputy assistant secretary for renewable energy, and led an effort to establish an ethanol industry in the United States based on non-food biomass sources. He also planned and executed a federal effort to develop solar energy and drove government efforts to promote hydrogen fuel technology.

He was a vocal advocate in 2002 for federal research funding for hydrogen fuel cells, and initiated a number of other programs, including helping Greensburg, Kans., rebuild its community using energy efficiency and renewable energy technologies after a May 2007 tornado.

Chalk considers today's investments in alternative and renewable energy long overdue. "Even though it is unfortunate that we have to spend the money to help rebuild the economy and get us out of a hole, we are turning a problem into a huge opportunity," he said.

Asia-Pacific leaders agree to shift focus of climate conference

At a Singapore meeting with President Obama and other leaders, the Danish prime minister, who will host the Copenhagen conference, proposes aiming for a political agreement as a preliminary step.

By Peter Nicholas, staff writer
N.Y. Times, Sat., Nov. 14, 2009

Reporting from Singapore – President Obama and leaders of other Asia-Pacific countries reached a consensus early Sunday that it is unlikely that negotiators can achieve a binding accord to limit climate change at an international conference next month, and should instead focus on a more limited agreement.

Danish Prime Minister Lars Lokke Rasmussen, who will host the Copenhagen conference, flew to Singapore and laid out a two-step process at a hastily arranged breakfast meeting, according to the White House.

Under his plan, negotiators in Copenhagen would try to reach a political agreement on attacking climate change as a prelude to a later, legally binding accord.

A senior Obama administration official who attended the meeting said, "There was broad consensus of support by the leaders" for Rasmussen's proposal. The official spoke on condition of anonymity.

The Danish prime minister's idea, which he has touted before, reflects a hard-eyed calculation that talks in Copenhagen will founder without an alternative approach.

"I don't think the negotiations have proceeded in such a way that any of the leaders thought it was likely that we were going to achieve a final agreement in Copenhagen, and yet thought that it was important that Copenhagen be an important step forward," said Michael Froman, deputy national security advisor for economic affairs.

Froman said that Obama spoke in favor of Rasmussen's proposal.

Nineteen of the 21 members of the Asia-Pacific Economic Cooperation forum were present at the meeting, including Chinese President Hu Jintao. China and the United States are the two largest emitters of the gases that cause global warming.

"There was a realistic assessment . . . by the leaders that it was unrealistic to expect a full internationally legally binding agreement to be negotiated between now and when Copenhagen starts in 22 days," Froman said.

Negotiations leading to the Copenhagen conference have foundered on disputes between developed countries and those with developing economies. Developed countries want all countries to agree to binding limits on greenhouse gases. Developing countries say they need more flexibility than binding targets would give them, and they need more aid from the wealthiest countries to achieve reductions in emissions.

In his remarks, Obama told his counterparts they face two choices, Froman said. One is to declare that they had tried and failed to reach a deal, but pledge to keep trying. The second is to "see if we could reach the sort of accord that the Danish prime minister laid out that would have immediate operational impact," Froman said.

Asked whether Hu seemed open to the path suggested by Rasmussen, Froman said, "I think he supported the concept of . . . making progress in Copenhagen, the importance of that, and using Copenhagen as a step toward resolving the overall issues."

Obama and other Asian-Pacific leaders are in Singapore for a series of meetings on economic issues. Obama arrived Saturday night and is scheduled to leave today for Shanghai.

The president is in the midst of a week-long tour of Asia, his first since taking office.

[Modesto Bee Editorial, Saturday, November 14, 2009](#)

Check air before you light that fire

As the popular song goes, "Baby, it's cold outside." Or, at the very least, baby, it's getting mighty chilly out there in the early mornings and evenings, as we wander through fall on our way to winter.

So, now's the perfect time to toss a few logs on the grate and curl up in front of a nice, warm fire. Right?

Well, maybe -- but only if you "Check Before You Burn."

That's the slogan the San Joaquin Valley Air Pollution Control District uses to remind us that the annual restrictions on fireplace use are in effect now through February.

Residential wood burning can pump dangerous levels of soot, ash, dust and other particulate matter into the valley's air. That pollution in turn has serious health implications, increasing bronchitis, asthma, lung disease and other breathing problems, and raising the risk of heart attack and stroke.

To reduce the pollution, each day the air quality agency issues one of two wood-burning forecasts: "Wood Burning Prohibited" on days when the air and weather conditions are poor, and "Please Burn Cleanly" on days when the risk is lower.

On "Burning Prohibited" days, any and all wood burning is prohibited -- including in fireplaces, outdoor chimneys and fire pits. Exemptions are granted to homes where natural gas service is not available, or where burning solid fuel is the only source of heat. Burning on no-burn days can result in a fine.

On "Burn Cleanly" days, only dry, seasoned wood or manufactured logs should be used, to minimize pollution.

The important thing is to always "Check Before You Burn." About 4:30 p.m. each day, the air district issues its county-by-county burning forecast for the following day. You can find it by calling 800-SMOG INFO, by logging on to www.valleyair.org/aqinfo/WoodBurnPage.htm, or by subscribing to a daily e-mail alert at www.valleyair.org/lists/list.htm.

Burn information for Stanislaus, San Joaquin and Merced counties also appears on The Bee's daily weather page.

[L.A. Times editorial, Monday, Nov. 16, 2009:](#)

Under the chamber's cyber-skin

The U.S. Chamber of Commerce is overreacting to a parody tweaking its stance on global warming.

The U.S. Chamber of Commerce has emerged in recent years as a vigorous proponent of strong intellectual-property laws, joining the entertainment industry, publishers and software developers in pushing the government to do more to combat counterfeit goods and digital piracy. That's a natural role for one of the business world's top lobbying forces, considering how important copyrights, patents and trademarks have become to U.S. firms in the information age. Lately, however, the chamber has resorted to the kind of intellectual-property overkill that only undermines the public's respect for the rights the chamber is so eager to protect.

A troupe of anti-corporate pranksters called the Yes Men drew the chamber's ire with a pair of stunts in October that mocked the lobbying organization's obstructionist position on global warming. The Yes Men's modus operandi is to impersonate people in order to ridicule their stance on issues. On Oct. 19, the troupe released a statement, purportedly from the chamber, announcing that it had reversed its position and would support a bill to cap carbon emissions. The Yes Men also created a fake chamber website, using the trademarked chamber logo and linking to pages on the real site, to add verisimilitude to the prank. Two members of the troupe then held a news conference at the National Press Club in Washington to elaborate on the change in policy, posing as chamber spokesmen (and slapping the chamber's logo on the podium). Minutes into the event, a representative of the real chamber interrupted the conference to expose the deception.

Edgy? Yes. Illegal? Hardly. What the Yes Men did was clearly parody -- an attention-getting practical joke that had (fake) chamber representatives discrediting the (real) chamber's

arguments. And the joke worked only because the hoax was exposed. More important, it was also commentary on public policy, the kind of protected speech that the courts and Congress have long exempted from infringement claims. Yet the chamber swung back hard at the troupe, using one of the most powerful weapons in the copyright arsenal. The day after the mock news conference, an attorney for the chamber sent a letter to Internet service provider Hurricane Electric demanding that the bogus website be taken down because it violated the chamber's copyrights. The 1998 Digital Millennium Copyright Law effectively compels Internet providers to grant such requests automatically, without examining their legal merit -- otherwise they risk being held liable for the alleged infringements too. But Hurricane Electric wasn't supplying Internet access directly for the site; it was providing bandwidth to another Internet provider, MayFirst/People Link, that connected the parody site to the Net along with about 400 other organizations' websites -- all of which were knocked off-line by the chamber's move.

MayFirst and the parody site got back online shortly thereafter. The chamber then filed suit against the troupe, saying it had violated federal trademark protection and anti-cybersquatting laws. In the chamber's view, the coordinated stunts were a scheme to promote Yes Men merchandise and ticket sales for a newly released Yes Men movie. "These infringing and fraudulent acts are antithetical to public debate on important issues, because they prevent the public and the press from knowing the true position of the intellectual property owner whose trademarks and copyrights were used without permission," the chamber's lawsuit argues.

The chamber needs to develop thicker skin. Rather than confusing people about the chamber's views on global warming, the "commercial identity theft" at the heart of the Yes Men's stunt helped call attention to them. That's what any good parody does. The aim of the bogus news conference and website wasn't to gain a competitive advantage over the chamber by damaging its brand or deluding the public, which trademark and cybersquatting laws were designed to guard against. It was to raise the heat on the chamber to change its position on cap-and-trade legislation. Granted, the troupe had a movie to promote, but that's speech too -- in the Michael Moore, corporate-America-as-villain vein. It's a message that the chamber may not like, but one that the Yes Men should be able to deliver without having to defend themselves in court.

[N.Y. Times column, also in the Fresno Bee and other papers, Friday, Nov. 13, 2009:](#)

Trucks, trains and the rain forest trees

By Thomas L. Friedman

Innovations for diesel vehicles stalled

Southern California entrepreneur Phil Roberts thinks he has a solution for the San Joaquin Valley's air pollution. His company has a device that he says can clean up any diesel vehicle's exhaust. It works something like a catalytic converter on a gasoline engine. [See an animation of the device]

Roberts says tests show the device can cut emissions of two major pollutants by 90% or more. But you won't find it in the new ozone plan that the San Joaquin Valley Air Pollution Control District approved earlier this year.

One reason: Until state regulators finish reviewing how well it performs, they won't approve the device's use. And until that happens, the district can't claim credit for any resulting cuts in emissions.

TAPAJOS NATIONAL FOREST, Brazil -- No matter how many times you hear them, there are some statistics that just bowl you over. The one that always stuns me is this: Imagine if you took all the cars, trucks, planes, trains and ships in the world and added up their exhaust every year. The amount of carbon dioxide, or CO₂, all those cars, trucks, planes, trains and ships collectively emit into the atmosphere is actually less than the carbon emissions every year that result from the chopping down and clearing of tropical forests in places like Brazil, Indonesia and the Congo.

We are now losing a tropical forest the size of New York state every year and the carbon that releases into the atmosphere now accounts for roughly 17% of all global emissions contributing to climate change.

It is going to be a long time before we transform the world's transportation fleet so it is emission-free. But right now -- like tomorrow -- we could eliminate 17% of all global emissions if we could halt the cutting and burning of tropical forests. But to do that requires putting in place a whole new system of economic development -- one that makes it more profitable for the poorer, forest-rich, nations to preserve and manage their trees rather than to chop them down to make furniture or plant soybeans.

Without a new system for economic development in the timber-rich tropics, you can kiss the rain forests goodbye. The old model of economic growth will devour them. The only Amazon your grandchildren will ever relate to is the one that ends in dot-com and sells books.

To better understand this issue, I'm visiting the Tapajos National Forest in the heart of the Brazilian Amazon on a trip organized by Conservation International and the Brazilian government. Flying in here by prop plane from Manaus, you can understand why the Amazon rain forest is considered one of the lungs of the world. Even from 20,000 feet, all you see in every direction is an unbroken expanse of rain forest treetops that, from the air, looks like a vast and endless carpet of broccoli.

Once on the ground, we drove from Santarem into Tapajos, where we met with the community cooperative that manages the eco-friendly businesses here that support the 8,000 local people living in this protected forest. What you learn when you visit with a tiny Brazilian community that actually lives in, and off, the forest is a simple but crucial truth: To save an ecosystem of nature, you need an ecosystem of markets and governance.

"You need a new model of economic development -- one that is based on raising people's standards of living by maintaining their natural capital, not just by converting that natural capital to ranching or industrial farming or logging," said Jose Maria Silva, vice president for South America of Conservation International.

Right now people protecting the rain forest are paid a pittance -- compared with those who strip it -- even though we now know that the rain forest provides everything from keeping CO2 out of the atmosphere to maintaining the flow of fresh water into rivers.

The good news is that Brazil has put in place all the elements of a system to compensate its forest-dwellers for maintaining the forests. Brazil has already set aside 43% of the Amazon rain forest for conservation and for indigenous peoples. Another 19% of the Amazon, though, has already been deforested by farmers and ranchers.

So the big question is what will happen to the other 38%.

The more we get the Brazilian system to work, the more of that 38% will be preserved and the less carbon reductions the whole world would have to make. But it takes money.

The residents of the Tapajos reserve are already organized into cooperatives that sell eco-tourism on rain forest trails, furniture and other wood products made from sustainable selective logging and a very attractive line of purses made from "ecological leather," aka, rain forest rubber. They also get government subsidies.

Sergio Pimentel, 48, explained to me that he used to farm about five acres of land for subsistence, but now is using only about one acre to support his family of six. The rest of the income comes through the co-op's forest businesses. "We were born inside the forest," he added. "So we know the importance of it being preserved, but we need better access to global markets for the products we make here. Can you help us with that?"

There are community co-ops like this all over the protected areas of the Amazon rain forest. But this system needs money -- money to expand into more markets, money to maintain police monitoring and enforcement and money to improve the productivity of farming on already degraded lands so people won't eat up more rain forest.

That is why we need to make sure that whatever energy-climate bill comes out of the U.S. Congress, and whatever framework, comes out of the Copenhagen conference next month, they include provisions for financing rain forest conservation systems like those in Brazil. The last 38% of the Amazon is still up for grabs. It is there for us to save. Your grandchildren will thank you.

Thomas L. Friedman is a columnist for the N.Y. Times.