



A Conversation with Sam Pulcrano Vice President of Sustainability, U.S. Postal Service

In 2009, the U.S. Postal Service collected, sorted, and delivered more than 177 billion pieces of mail. Finding more sustainable ways to process this mail and lower the carbon footprint of such a massive effort continues to be a central goal of the U.S. Postal Service. We spoke with Sam Pulcrano, Vice President of Sustainability at the U.S. Postal Service, about his leadership in forging sustainable operations, reducing the Postal Service's carbon footprint, being good environmental stewards, and how it is leveraging innovation in all its sustainability efforts.

On the History and Evolution of the U.S. Postal Service

The Postal Service is an independent government agency. We go back to 1775, when the Second Continental Congress first determined that we needed a postal service. The Post Office Department was born at that time. Benjamin Franklin was our first postmaster general. Today, the Postal Service is governed by an 11-member Board of Governors, nine of which are appointed by the President of the United States. Two management members, our Postmaster General, Jack Potter, and our Deputy Postmaster General and Chief Operating Officer, Pat Donahoe, are also members.

We are a self-supporting organization. We receive absolutely no tax dollars. We totally rely on the sale of our products and stamps to generate revenue for our operating expenses. Our annual revenue is about \$68 billion. We deliver half of the world's mail, and we deliver to 150 million residential and business addresses every day in the United States. We have nearly 600,000 employees and 36,000 retail locations across the country. We're the most trusted government agency for five consecutive years in a row and the sixth most trusted business in the nation as determined by the Ponemon Institute.

On the Challenges Facing the U.S. Postal Service and its Sustainability Efforts

The challenges are related to the economic environment. First and foremost, how can we find some new ways of growing revenue for the organization? We've been exploring new opportunities like mail-back programs. We're piloting



in 1,500 post offices providing prepaid postage envelopes for people to mail back their small electronics, including cell phones and digital cameras, [to places] where they get properly recycled. We're also working with the University of Maine, State of Maine, EPA, and DEA, [piloting a] mail back program of unused pharmaceuticals to keep them out of the hands of teenagers and out of landfills and water supplies. The other area is reducing costs and being as efficient as possible. In 2009, we had a significant drop in mail volume of about 26 billion pieces in a single year—that is a significant drop in revenue in a very short time. We had to react very quickly to reduce costs. On the sustainability side, we did that by establishing green teams [that] focus on some very specific areas [in which we can] become more efficient and reduce the overall cost of the organization.

On Leading Sustainability Efforts

My current position was established in May 2008, at the same time that we announced the formation of the U.S.

Postal Service's Office of Sustainability. I'm responsible for unifying the Postal Service's sustainability efforts across all business units and the organization. Our business units are very engaged in our green efforts. My job is just to pull it all together, facilitate, integrate their activities, and tell our corporate story.

On U.S. Postal Service Environmental Stewardship

We've always been a leader in using alternative fuel-capable vehicles and recycling. In fact, we tested our first electric vehicle back in 1895 in Buffalo, New York. We've been testing our electric vehicles for almost a hundred years now. Today, our engineering group manages the largest alternative fuel-capable vehicle fleet in the world. About 40,000 [of our vehicles] are ethanol fuel-capable as well. Given our size and [the fact] that we touch every community in the United States, we have an obligation to engage in green business [practices]. We are continually focused on adopting sustainable ways of improving and doing business, in order to create a long term value for our customers, our employees, and all of the communities that we serve. It's our objective to become known as a world class sustainability leader.

We have a corporate goal of reducing our facility energy 30 percent by 2015, our petroleum fuel use 20 percent by 2015, and also increasing our alternative fuel use 10 percent by 2015. We recently (last year) set [a] corporate goal of reducing our greenhouse gas emissions 20 percent by 2020. We also voluntarily comply with some of the laws and executive orders that define sustainability goals for the federal sector.

This year, we launched the Green Newsroom. It's a library of the Postal Service's green news, history, and information. We also have the green website at www.usps.com/green that our customers can access. We have all kinds of tips that they can use, which include resources for mailers to green their particular mail products, and [other ways] they can use to improve their environmental impact.

On Benefits of Reducing, Reusing, and Recycling

We have a slogan, "Reduce, Reuse, and Recycle," and it's becoming more than just a slogan to us. It's actually becoming our way of doing business. Our human resources group has secured lobby recycling in more than 10,000 post offices. Customers are able to come into the lobby, take their mail out of the box, go to our counter, separate the mail, take the mail that they want to keep, and then place the mail that they want to dispose of securely and safely in a locked container in that lobby. We take that product and recycle it. We make about \$10–11 million dollars a year in lobby



recycling and other mail recycling. Last year, we recycled about 270,000 tons of paper, plastics, and other waste. It's a decrease in greenhouse gas emissions of approximately 1.67 million barrels of oil.

We're also growing our online transactions. If you go to [the homepage of] our green website at www.usps.com/green, you can find a little calculator up in the right hand corner that we call "Skip the Trip." By using our online products and services, for example, you can arrange for carrier pickup [from your home or office.] We call this service "Click-N-Ship," and it includes other online services, [such as printing labels and tracking packages.] In 2009, [this area] grew an additional 13 percent—our customers are making fewer trips to the post office, therefore reducing their greenhouse gases and their fuel use as well.

In addition to that, our facilities group has completely revised how we design and construct new buildings so that they are more energy efficient. All buildings are required to have a sustainable building design as well as energy-efficient lighting and HVAC systems. We also use native plants and other sustainable landscaping at our facilities to ensure that we're helping the environment in every way.

The facilities group is also continuing to explore other alternative energy forms. They already have an array of solar photovoltaic systems [in use]. They are also using a geothermal HVAC systems. Where the price point and the return on investment are appropriate, we continue to look for opportunities to improve in those particular areas.

On Decreasing Costs and Realizing Savings

Our sustainability projects are clearly making a positive impact on the environment, but they're also helping us save money. We provide universal service at affordable rates, so



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— Sam Pulcrano

reducing energy and fuel use helps us keep our costs under control as well as provide the trusted service that Americans expect. Many of our green initiatives focus on what we call “no cost” or “low cost” [solutions]. These include turning off lights when they’re not in use, turning off your computer monitors, and adjusting thermostats in facilities and offices. All of those things help contribute to reducing our cost while enhancing our energy savings.

We also started piloting a cross-organizational green team made up of representatives from maintenance, IT, operations, and supply management. We decided to focus on five key areas: reducing energy use, lowering petroleum vehicle use, improving water efficiency, reducing the purchase of supplies, and reducing our solid waste cost as well as increasing our recycle revenues. We had great results.

We expanded this effort to our eight regional offices. In just one year, they were able to achieve a little over \$5 million of savings in just nine buildings alone. Green teams are also going into some of the largest facilities and establishing teams where they see a good bang for the buck. We’re

[employing] Lean Six Sigma to help drive our performance. Lean focuses on reducing waste and improving the process flows, while the Six Sigma aspect concentrates on reducing variation in [process while] improving quality. When you put those two together you can get a wonderful result. Our plan is to roll it out to all 80 of our districts across the United States within the next two years.

On Developing New York City’s Largest Green Roof

This is a great story. This is one of our largest environmental projects to date. It’s the largest green roof in Manhattan, [at] nearly 2.5 acres. Our facilities department started construction in September 2008 and completed it in July 2009, within budget. More importantly, 90 percent of the former roof was recycled and reused in the current roof. We expect it to last about 50 years, almost twice the lifespan for a roof of that type. We’re projecting that it’s going to reduce our heating and cooling costs about \$30,000 per year because of its great insulative factors.

The roof also has a great environmental effect, reducing the water runoff into the New York City municipal water system by 75 percent in the summer and 40 percent in the winter. It’s created this wonderful environment for our employees, who are allowed to go up there on their breaks and lunch periods. We have 14 benches made of Brazilian Ipe wood, certified sustainable by the Forest Stewardship Council. The other critically important [fact] is that 59 percent of the green roof surface is vegetation and plants that are native to the northeast area.

On Providing Customers with Eco-Friendly Products

We’re leading the mailing industry in green certification of our products. We are the first and only shipping or mailing company worldwide that has earned “Cradle to Cradle Certification” for its environmentally friendly design and health standards for Priority Mail and Express Mail products. When you go into the post office you will find the “Ready-Post” envelopes and mailing supplies, all of which have Cradle to Cradle Certification—they’re 100 percent



The U.S. Postal Service’s first green roof is the Morgan Processing and Distribution Center (P&DC) in NYC, a showcase of resource conservation and innovation.

recyclable. To give you some idea of the volume, in 2009 we provided nearly a billion Cradle to Cradle Certified mailing supplies to our customers.

[Receiving Cradle to Cradle Certification] is really an exhaustive process. Using the Priority Mail box as an example, the process literally gets into breaking down every single component that goes into making that box. How is the cardboard made? What are the raw products that go into making that cardboard? What are the chemicals that go into the ink? We were very pleased with the result of [the certification] and we're going to continue moving forward in that area. In fact, we're actually working right now to get our stamps Cradle to Cradle Certified.

On Expanding the Use of Alternative Fuel Vehicles

We have a very large fleet. We have about 210,000 vehicles on the road every business day. You see the postal trucks everywhere in your neighborhoods, and about 44,000 of them are alternative fuel-capable vehicles. We're focused on increasing the use of our alternative fuel, so we're testing

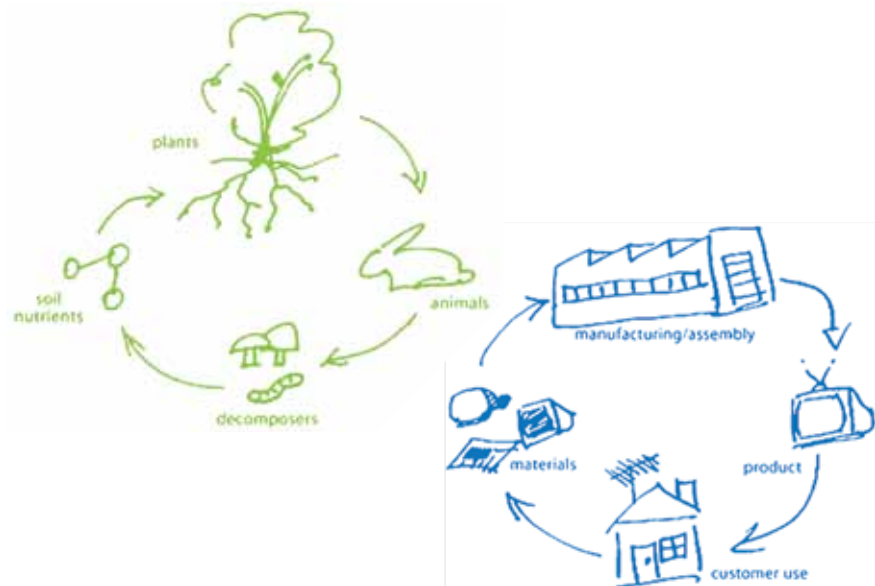
every type of vehicle there is—natural gas, hydrogen fuel cell, etc. Our engineering group is now testing two fourth generation, Chevrolet Equinox hydrogen fuel cell vehicles. They have a partnership with General Motors and the funding is coming from another partner, the U.S. Department of Energy. We've had [a fuel cell vehicle] that delivers mail and has done so since 2006. We now have a second fuel cell vehicle operating in the Washington, DC area. In fact, we're even testing some unique three-wheeled vehicles. We've even built a little trailer for the carrier to haul his or her mail for their particular routes. We're testing [the trailers] in California, Arizona, and Florida. They cost about two cents a mile to recharge and to operate and have a range of about 40 miles.

In addition, our engineering group just announced a contract to convert our [petroleum] postal vehicles to electric. Five companies have bid on that particular project. Each one is going to create an electric motor platform and battery platform. We're very proud that we also deliver [a large quantity of] mail without the use of petroleum fuel vehicles. We

Cradle to Cradle® Certification



Certification permits an organization to tangibly and credibly demonstrate its efforts to design eco-effective products. Cradle to Cradle Certification is a multi-attribute Ecolabel that assesses products for their ingredients' human and environmental health characteristics, their recyclability or compostability, and their manufacturing characteristics.



This model calls for products to be developed for closed-loop systems in which every ingredient is safe and beneficial—either to biodegrade naturally and restore the soil, or be fully recycled into high-quality materials for subsequent product generations.

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USPS Alternative Transportation Solutions



Bicycle Delivery



Three-Wheeled Electric Mail Delivery Vehicles



Hydrogen Fuel Cell Vehicle

have bicycles routes in several states that save about 15,000 gallons of gasoline per year. We also have a large walking fleet: We have 9,000 routes where [the carriers] actually walk the entire route, and 80,000 of our routes are what we call park-and-loop routes.

On Achieving Corporate Sustainability

We've learned the importance of establishing goals and measuring against those goals to improve our system. The ultimate result is to drive down energy costs and greenhouse gas impact.

Let me just give you some of the things that we're most proud of as highlighted in our 2009 annual sustainability report released in May 2010.

Since 2005, we've reduced our facility energy use by 10.8 trillion British thermal units. It is a significant reduction and results in about \$150 million in avoided costs per year. Since 2007, we have saved \$400 million. We've also reduced our contracted fuel use by \$314 million in 2009. In addition, we've changed many of our paper-based activities to online activities. Just last year alone, we saved 10 million sheets and forms by taking that paper out of our system, thanks to a human resources project. We've also taken customer barcode sorters that we were going to scrap and recycled them. They were redesigned into another piece of equipment that we can use on the workman floor, saving us \$70 million. We've done a much better job of recycling our mail transport equipment. We earned \$2.4 million in income by improving how we recycle damaged equipment and products that we

can't use any longer. We'll continue to achieve our sustainability goals across our functions and departments. We think we're building a very solid foundation for our organization, our employees, and our customers.

Our employees are very proud of these accomplishments and the recognition that we've received. Our objective is to seek continuous improvements, so we always keep trying to raise the bar just another notch. We're in every community across America each and every day. We need to be very focused and committed to achieving our environmental goals and objectives as an organization. I think our Postmaster General, John Potter, puts it best: "Quite simply, we want to be the best. We want to be the best neighbor, we want to be the best business partner, and we want to be one of the best places to work when it comes to sustainable business practices." ■

To learn more about the U.S. Postal Service and its sustainability efforts, go to www.usps.com/green



To hear *The Business of Government Hour's* interview with Sam Pulcrano, go to the Center's website at www.businessofgovernment.org.



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To read the full transcript of *The Business of Government Hour's* interview with Sam Pulcrano, visit the Center's website at www.businessofgovernment.org.