It's great to be here with you today. It's been – still is – a really tough time for this part of the country. The floods in Baton Rouge and surrounding areas have devastated that part of the state, and its mind boggling to think about the number of people who have lost so much.

I grew up here in New Orleans, met my wife at LSU in Baton Rouge, and we still have lots of friends and family in the area. At Waste Management, we have dozens of employees personally affected. So, the thoughts and prayers of the entire Waste Management team go to everyone impacted by the flooding.

But Louisiana will come back - whether it was the great flood of 1927, Hurricanes Betsy and Camille or Hurricane Katrina - Louisiana has weathered the water and has always come back stronger than before.

And it's an appropriate metaphor for recycling. We have weathered many storms in recycling over the years, one of the greatest being the last four years. So, how do we ensure that the recycling industry follows Louisiana's lead and comes back stronger than before?

Well, I'm an optimist by nature, and I happen to think there is plenty to be optimistic about when it comes to the recycling industry. Some may say that my optimism wasn't showing when we came out so publicly and said "recycling is in crisis". We had people telling us that we were only sounding alarm bells because we didn't want people to recycle, that we wanted only to fill our landfills. I can promise you, nothing could be further from the truth.

So, why did we step out like we did and why have we been so public on this issue? What do we really want from our recycling business? And where is Waste Management going with recycling?

I'll try to address each of those questions, but let's first start with some numbers, because for companies like Waste Management, numbers are important; important for our employees, and important for our shareholders.

We have more than 3,000 Waste Management teammates in our recycling business and we processed and brokered over 11 million tons of recyclables in 2015. We invested over a billion dollars to build the largest residential recycling business in the entire world. And we built it because it was profitable, and in the business world, investment follows profit. How profitable? For those that think we are only a landfill company, you might be surprised to know that the returns on investment in recycling have historically been much higher

than those in our landfill business. So we kept investment in our landfills static, while investment in our recycling infrastructure went up by over 400%.

So you can see why we are committed to recycling, and yes, it hurt when the wheels started to fall off in recycling. It hurt both our employees and our shareholders. And consequently, it hurt our investment in recycling infrastructure.

So, how did we get here? Well, in 2012 and 2013, we saw economic trends in China, and projections for slower growth there and we knew that would reduce demand for fiber products. We then saw the correlation between the price of oil and recycling commodity pricing – along with the projections for future years. And we started to get a picture of what we could expect in coming years. What we saw was concerning, to say the least. It didn't exactly paint a rosy picture for a line of our business that had, up until then, been a focus for growth and investment for us. In fact, for good portions of the last four years we were actually losing money in our recycling business. Remember, I said investment follows profit. So guess what follows losses? Dis-investment.

So, we set out to turn that around, to protect our investment – for our employees, our shareholders and for our customers - so that we could continue to provide the recycling services we *know* our customers want at a return we know our shareholders *demand*.

We also knew we wouldn't be successful by going it alone. In fact, while some in the industry talked about the downturn as "just another short cycle, like previous downturns," we saw the changes in the world around us as much more systemic than that. And, we knew that, in order to protect our investment in recycling, we would need our customers, governments, communities, and other stakeholders to understand what was happening so that we could all work together to make the changes necessary to adapt to global changes beyond our control. To paraphrase a maxim about floods, we could each sink alone, or we could float together.

At the same time we were seeing these troubling global trends unfold, our customers continued to ask for more recycling, even as the economics of recycling were unwinding. We saw a growing disconnect between the services our customers wanted, and what they were willing to pay for them. Our customers wanted more recycling and they wanted to pay less. Isn't that what we all want, more for less? And, in a high commodity price environment, that works. In today's commodity price environment, it just doesn't.

We also knew that if we, as the largest recycler, were losing money, the rest of the for-profit recyclers had to be even more concerned. You see, we have a lot of other businesses

to pick up the slack. The smaller recyclers sink or swim based only on recycling, and they were struggling. Many have closed their businesses over the last three years.

At the end the day our goal was simple: make sure that recycling was sustainable for the long term – both environmentally and economically. I believed – and still believe – that we needed to take a leadership role in shaping the future for recycling.

In fact, we need to go beyond recycling to other conversion technologies that unlock the economic and environmental value of the materials that we collect. The materials that we collect and bury each year would be worth $10 billion if we could separate and re-use or re-purpose them. Of course, to do so, you need a different type of technology, because the materials we receive as waste are generally co-mingled or contaminated, so traditional recycling wouldn't work for those materials.

And, since I've been CEO, we've invested nearly a billion dollars trying to find new technologies to provide an alternative to the landfilling of materials. And the technology exists, it just isn't economic or scalable yet. But we will keep searching for more efficient ways to manage materials for the good of Waste Management, our customers and our planet, because remaining static, or sitting on the sidelines watching our industry struggle, is not an option for Waste Management.

So – we began talking about the challenges with the recycling business everywhere we could. We talked about it publicly and often. Our goal was to elevate the dialogue, and to work together to ensure the long-term viability for recycling. So that it could survive and thrive even during the wild swings and volatility in commodity markets.

So, yes, we do believe the recycling industry needs to change. Just like almost every other industry since the beginning of time, change is the only constant. And if the leadership role and public position we took made us unpopular, attracted criticism in some circles, but led to discussions about the fundamental changes necessary to set recycling up for a vibrant future - then I'll gladly take all the criticism that came our way.

And while the needed changes have been slow going, we've made significant progress and we're seeing many of our customers and communities acknowledging that change is required, and finding ways for us to work together.

So what did we specifically do to make recycling sustainable for Waste Management for the long term?

First, regarding efficiency: As demand for commodities fell and stayed low, we began to focus on fine-tuning our operations. Inefficient, underperforming MRFs have closed. Underperforming operations have been identified and have been – or will be – revamped. I'd suggest that the market downturn has created an optimized and more efficient recycling industry. That is good. But it has also mothballed a lot of facilities; which is ok, for now, but what happens when demand picks up and there aren't enough plants to handle the material? That is why we need to make the business model more stable – so that we can encourage more investment, not dis-investment, in new, efficient recycling assets.

Next, material quality. As we all know, as recycling grew, material quality suffered. High recycling goals led to a push to recycle anything and everything. We saw the first signs of cracks in the system with China's Operation Green Fence in 2012. For the first time, we had to focus intensely on improving material quality. This, in turn, increased processing costs and forced our entire industry to reflect on what needed to change.

As an industry, we started to need to be realistic about what MRFs are, and are not, designed to do. We had to say "no" to materials that we know wreak havoc on our MRF equipment – whether it be because these materials drive up operating costs, or because they have limited end markets.

The shifting feedstock into our plants is also a challenge. Our feedstock has shifted by 30 percen*t* over the past decade as contamination has increased and plastics have replaced paper. MRFs create a feedstock for paper mills, steel mills and plastics recyclers. And like other production facilities, they rely on a high-quality, homogenous feedstock. I don't know of any other industry that could make high quality, consistent product with a feedstock that is changing as fast as ours.

At the end of the day, MRFs have limits, and our customers have cost constraints. We need to be cognizant of both, and offer the best solutions that our customers can afford.

If they want to recycle everything despite the cost, we can do that. If they want to recycle *only* those materials that can be recycled at a minimum cost, we can do that too. And, we can do anything in between. In other words, we at Waste Management have adapted our business offerings to meet our customers' specific needs. As those needs change, we will change.

Finally, we turned our attention to changing the way contracts are written. In order to preserve our industry, we're all having to re-educate our customers on the true economics of recycling. We are now insisting that our contracts cover our processing costs first before we rebate monies to our customer. This changes the role of recycling in our community

from what was in the past a commodity-based, perceived "free" service, to a cost-based service.

But communities are merely groups of individuals. And, at the end of the day, recycling starts with an individual choice. What I do with my recyclables ultimately affects an entire global industry. Our individual success defines community program successes. And, ultimately, this drives a global environmental impact. So, we need to change individual behavior. We need to do a better job of educating individuals on how to recycle often, but recycle right.

So, changing individual consumer behavior combined with weak global market conditions mean that recycling is going through a pretty significant evolution. And while change is hard, every industry goes through it – and more often than not, for the better.

Innovation, adaptability and evolution are pivotal to any industry's survivability and future growth. And the recycling industry is no different. So, how has the recycling industry innovated, adapted and evolved? And what's ahead?

Going back to the 1990's, our customers asked us to help them recycle more, and we adapted to those needs and desires and began to shift our investment toward more recycling assets.

By the turn of the century, recycling rates had more than doubled, and we began to innovate to take recycling to the next level. Recycling *more* was the goal, and cities developed high recycling goals, and even Zero Waste goals.

We learned that we could collect a lot more recyclables when we provided convenient, wheeled, single stream recycling carts. And, we invested in technology to separate the materials at our single stream recycling plants.

We all measured success by the tons collected for recycling and began to focus on growing those tons. Resource-poor China was growing at the same time, so they absorbed much of our recyclables. Recycling rates went up, in fact they more than doubled in some communities where we offered single stream recycling.

But the world was changing. More plastic, less paper. More small single service containers, more contamination and lower demand for recyclables as the world economies slowed down.

So, what's the solution to all this? To get there, I think we have to start with the question, what's the goal? Is it to recycle everything we can? Is it ultimately to reduce greenhouse gas emissions? Or is it to take a holistic environmental view and adapt each situation to maximize environmental benefits and meet our customers' needs?

If the goal is to recycle everything we can, we have a great deal of work to do. There is a high cost to achieving this goal, and business-as-usual is simply not an option. Although we all started with weight-based recycling goals, we now have much more sophisticated data that allows us to address environmental benefits more surgically – to get better results, more cost-effectively.

The State of Oregon is starting down this path. They are using lifecycle analysis to identify the places where they can achieve the greatest environmental benefits. Then, they are developing specific goals for some of the high-potential materials like plastic, carpet and food. This is smart goal-setting. Using facts to create the *right* goals. And you're seeing this kind of thinking and analysis in action in other states – like Minnesota – and also at the federal level, including the EPA.

The idea of Lifecycle Thinking to help set goals is gaining a lot of traction, broadening the conversation, and encouraging us all to think about our goals and our priorities differently.

So, in setting the right goals, we need to know the environmental impacts associated with the materials we manage. Well, we set out to try to figure that out, so that we could get data that we could use to drive the much needed conversation of "change".

We looked at the entire spectrum of services we offer our customers and the greenhouse gas reduction benefits of each of those services in relation to the cost per ton of CO2 emissions reduced. We realize this is only one way to look at the issue, and we recognize there are other ways to look at it, but here is what we found.

Of course, reducing the use of virgin resources is the biggest winner for the environment. But, when you combine state-of-the-art landfill gas-to-energy systems with best-in-class recycling – that's all of the fiber products, plastic bottles and cans possible - you get 84% of the greenhouse gas reduction benefit. That's where you get the biggest bang for the buck environmentally.

Beyond this level of diversion, the cost goes up - a lot - especially in relation to the smaller increments of greenhouse gas benefits obtained by recycling additional materials.

Given that, should we try to recycle every last drop of material at a very high cost per ton of carbon reduced? Or, should we focus on recycling those materials that will get us the "Biggest Bang for the Buck": the best environmental benefits at the least cost?

Our study shows that we should be working harder than ever to *recycle more* of the materials that we've been recycling for years: plastic bottles, cans and fiber products. In other words, focus on recycling the *right* materials, rather than spending a lot of money trying to recycle things with a smaller environmental benefit, but a huge cost. If someone wants to pay the extra cost of recycling those other materials, we will gladly do it. But, as a for-profit company, we cannot do it at a loss.

This is why lifecycle analysis is so important, because if our goal is to implement programs to benefit the environment, then we can achieve significant greenhouse gas emission reductions by recycling *more* of the right things, without breaking the bank. However, trying to recycle everything drives the cost up with less of an environmental benefit.

We do believe it's time to move forward, toward a Life Cycle Thinking approach, where we evaluate each material to determine its optimal flow and value *throughout* its life – not just how it is managed at the *end* of its life. And that value could change. If we find new technologies for organics, we may be able to unlock the environmental benefits at a lower cost. With organics being such a large part of the waste stream, we believe it is worth investing in technologies to deal with organics, and we have done so.

Lifecycle thinking requires us to rethink our linear business models and instead, take a broader approach to this issue, evaluating environmental impacts and costs across the supply chain.

So we see a lot of change in the future, but we also see a lot of opportunity for recycling. Seizing that opportunity is going to take the collective efforts of all stakeholders in the chain, working together, to do some things differently, so we all – together - create successful and sustainable environmental programs for the future of our communities. And we need to make the solution lasting, to ensure sustainable investment in our future environmental programs.

It's time to use new knowledge to educate consumers about recycling, to develop new contracts and to change our goals and metrics in an effort to get it *right* when it comes to impact on the environment.

And, like the state and federal renewable energy incentives, we should also encourage investments in new technologies through tax credits, or some other form of subsidy, to encourage investment until such time as the technologies can stand on their own.

The challenges of the past five years have forced us to be smarter and more efficient at what we do. Our industry has shown its resilience and is primed for the next chapter – a chapter that recognizes recycling as a critical environmental service. One that recognizes that we can't keep looking at our goals and programs through the same lens we did 20 years ago. One that uses data and new information to work smarter, focusing our efforts on recycling the *right* things to get the *greatest environmental impact*.

It's our choice. Are we Blackberry or Apple? Yahoo or Google? Will we give up, give in, or create change?

Just like Louisiana has survived some of the harshest environmental impacts seen in our lifetimes, we believe that recycling and materials management can both survive this storm and thrive, and create lasting, positive environmental impacts. Because, like New Orleans, we are not here for one generation, but for generations to come. And it is important that we get the environment right for future generations – not just in recycling, but in other areas.

And I hope that all of us in this room can work together, through recycling and our other collective environmental stewardship, to leave Louisiana, and the entire planet, to future generations in better shape than when we inherited it.

My Dad grew up in the WWII era that some call the greatest generation. If we can improve our planet for my kids and their kids, we can stand alongside my dad's generation as a great generation.

###