

## **The Ugly Truth about Energy and the American Economy**

John (McElroy), thank you for that introduction and for those wonderful words.

As John noted, I am not from the automotive world. Sometimes – just briefly – I wish I were solely in an industry like this ... one that has such a long and glamorous history ... one that is so tied to the consumer that feedback is almost instantaneous ... and one whose products are so anticipated from year-to-year that customers flock to your auto shows and stand in awe of your finished product.

But then ... I see the headlines. Activists are calling on you to make smaller cars – or, better yet, no cars at all. The government wants you to constantly make cars safer and safer ... and yet can't understand why fuel efficiency hasn't increased substantially. The politicians blame you for everything from climate change to our energy crisis. And, finally, there's the American consumer, who wants to drive a Hummer, but fill the tank up for \$15 dollars.

I see all of that and I think ... thank you very much, but the chemical industry doesn't look so bad after all.

[Pause]

So, if I'm not here as a peer from the auto producers, I must be here as a supplier, right? I mean, after all, Dow sells some \$1.5 billion worth of products into your industry. It's a very big – and satisfying – part of our business and one we appreciate very much.

And we take a great deal of pride in working with you on solutions for some of your biggest challenges ... increasing efficiency with lightweight materials, reducing emissions and – as vehicles become smaller – engineering them to become safer, too.

But, no, I'm not here as a supplier, either. (Although, if you do want to know more about Dow's innovative automotive technologies, see me after we're done and I'll fill your ear!)

I'm here today as a fellow manufacturer ... a manufacturer who's facing the same kinds of issues and concerns you are ... a manufacturer who's as concerned about the future strength of the American economy as you are ... and, frankly, a manufacturer who's here to ask for your help as we face – together – the truth about energy and the impact it's having on our economy.

You, of course, are facing the brunt of that impact on the showroom floor. When purse strings are pulled tight, you suffer first. But suppliers, like those in my industry, are not far behind. After all, some 95 percent of the things you touch every day have a chemical component. So when the economy starts to come unhinged and consumers stop buying, we all take a deep breath and hold on.

Well, the American economy hasn't come unhinged yet. It's not on its deathbed. But make no mistake ... the American economy is under siege. And it has serious problems to overcome if we want to return it to a state of vigor and vitality.

Forces – mostly of our own making – are chipping away at the very thing that has made this economy so strong for so long. I'm talking, of course, about you ... and me ... and the other hundreds and hundreds of companies that comprise the country's manufacturing base – the foundation on which everything else in our financial system rests.

And here let me borrow a line from an unlikely source, Luciano Pavarotti, the famous Italian tenor who recently passed away. Coincidence would have it that Pavarotti would have been 72 today. You don't have to be a fan of the opera to be a fan of the man who not only gave us great music, but many great insights as well. One of his comments is especially appropriate for us.

"I am a very optimistic human being," Pavarotti once said, "but I like the truth!"

That seems as good a way as any to approach our most vexing problems today. Americans, I have experienced, are optimistic by their very nature ... but they react best to the truth.

When their sovereignty was threatened in WWII by powerful and mighty countries, the Americans could have acquiesced and sought immediate peace. They did neither. They hurled themselves into the fray with an attitude that they not only could prevail – but would prevail.

When Sputnik raced across the heavens 50 years ago this month and the Americans faced the shocking prospects that others were just as interested in science and innovation as they were, what did they do? They rolled up their sleeves ... and went to the moon.

They exhibited that Pavarotti-like attitude of unrestrained optimism coupled with an amazing can-do approach.

When I look at the state of our economy – and especially the state of manufacturing – I have come to one – and only one – conclusion: the time is right for us to face the ugly truth about our energy crisis, roll up our sleeves and get to work. The time is right for America to begin focusing on solutions with the can-do optimism and leadership it has demonstrated time and again throughout its history.

The fact is that we are in the middle of what could be a very long and very painful energy crisis.

This is a crisis that goes beyond the very real pain many may face this winter when they go to pay their home heating bills. And it's even beyond the disbelief and discomfort Americans feel every time they approach a gas pump these days.

The crisis we face now is so much graver because it has ballooned into a crisis in the manufacturing sector – the very foundation of our economy.

Let me share with you the impact on my own industry, using Dow as an example. Despite a very stringent and successful effort to reduce consumption and increase energy efficiency, Dow's hydrocarbon and energy bill last year was nearly \$22 billion – which is about half of our total operating costs. By comparison, we spent \$8 billion on energy and hydrocarbons in 2002. In other words, we had a \$14 billion jump in energy and hydrocarbon costs in just four years.

That was just one company in one industry. Is it any wonder why the U.S. chemical industry went from a trade surplus of more than \$20 billion to a deficit of more than \$9 billion in the past decade?

As businessmen and women, I'm sure you can imagine the value destruction from that \$29 billion swing. Companies like mine shut down operations, raised our prices, ramped up energy efficiency efforts and became more innovative. But there's only so much individual companies can do.

We're not alone, of course. This country has lost more than three million manufacturing jobs since the year 2000, primarily because we don't have a coherent energy policy.

The auto industry gets a double-whammy. You get hit on the manufacturing floor with increased energy costs, but also get hit when consumer buying habits suddenly change because gasoline prices spike.

The bottom line is that energy costs – a basic raw input that none of us will escape any time soon – is making all of us less and less competitive around the world. And at the end of the day, there are only a few ugly choices: move your business and jobs and philanthropy to geographies with more reasonable energy costs or simply shut down.

Since more than 70 percent of all business research and development comes from the manufacturing industry, losing that base also means losing investments in future innovations and technological advancements. It means our science-based education system will continue to erode because without manufacturing, many scientists and engineers will have no place to work. Why train to be an engineer or a scientist if there is no place to apply your knowledge? In short, we'll soon lose our comparative advantage to compete with countries that have energy policies that promote – instead of punish – its manufacturing base.

As bad and as ugly as that picture is, the sad fact is that it could get worse – much worse – before it ever gets better.

Keep in mind that global energy demand has increased about 60 percent in the last quarter century. And forecasts indicate that the next quarter century will show a similar percentage increase but – and this is important – from a much bigger base.

Part of that is driven, of course, by the huge growth in Asia, particularly China. They're building at least one coal-fired power plant a week there in an effort to keep up with demand. Coupled with the growth of the middle class in China – who will ask for more cars, televisions and all the creature comforts that accrue to the middle class – that means continued huge demands for traditional energy well into the future.

For you, the news is either good or bad, depending on which activist you listen to. There are currently about 806 million vehicles on the road today, burning some 260 billion gallons of gas annually. By 2020, there could be a billion cars on the road.

You get to sell more cars, but you also bear the brunt of environmentalists and government agencies that are pushing all of us – and rightly so, I might add – for overall reductions in greenhouse gas emissions from all sectors.

There is no escaping the unfortunate truth that motor vehicles are responsible for one quarter of the annual U.S. emissions of carbon dioxide. Don't get me wrong. The auto industry has done an excellent job of responding to consumer demands. It has performed admirably at satisfying wants and needs while at the same time keeping efficiency in the ballpark – no easy feat. I also recognize that the carbon dioxide issue will require commitments across all emitters and every industry.

But a new day is here. And that new day will require re-educating consumers that perhaps they can't have it all. It will require a self-awareness that we all share in the responsibility and, therefore, must share in the solution.

And it will require something else ... something that hasn't always had the best track record of success. It will require a new kind of partnership that we haven't seen in a long time: very aggressive, very goal-oriented, public-private partnerships.

I say that because it's clear that voluntary efforts simply have not worked. Britain's climate envoy, John Ashton, said it best recently when he noted that we all need to stop talking about talking when it comes to energy and climate change – which are, by the way, unavoidably linked. The voluntary approach, he noted, has been as effective as a voluntary speed limit sign.

“We don't just need an approach that works,” he said, “we need an approach that works very quickly.”

I am, if nothing else, a dyed-in-the-wool free market capitalist. I know the lifting power of an unfettered economy – as President Kennedy told us – to raise all boats. As a rule, I believe this is true. But I also believe there comes a time when a top-down, goals-oriented approach is the only way to get us securely to the future.

That time is here – now – on energy and climate change.

Does that mean, as our own Michigan Congressman – John Dingell – is proposing, a gas tax to change consumer driving and buying behavior? Perhaps. After all, as consumers' love affair with SUVs and crossovers continues – as safety elements continue to be mandated – the average vehicle has packed on 29 percent more weight over the past two decades. Clearly that is not the way we need to go if we want to reduce energy demand with more fuel-efficient vehicles.

Does a top-down approach mean more development off our own shores to tap into clean-burning natural gas? I think it must, especially if we can use the revenues to fund a series of research projects around renewables, cleaner energy and coastal restoration.

Does it mean the U.S. joins the rest of the world in abandoning voluntary goals when it comes to greenhouse gas emissions? I think it will, if not with this Administration then certainly with the next.

Does it mean higher CAFÉ standards? Eight of the eight Democratic Presidential candidates – as well as two on the Republican side – favor higher fuel efficiency standards. Given the mood of the electorate, it appears higher fuel economy standards are a political certainty.

Our challenge will be to remind policy makers that CAFÉ standards are – at best – a blunt tool when it comes to solving our energy policy. And we need to remind them that focusing on such a narrow area does a grave disservice to finding truly effective and sustainable solutions.

Certainly part of Dow's growing understanding of energy and climate change policy has been the realization that there is not one magic bullet out there to attack this crisis. That's why we – like some of you – are part of the U.S. Climate Action Partnership and why we advocate a broad-based set of actions relating to both climate change and energy. We see cap and trade as the only system that brings compliance to a target and allows innovations to get to those targets.

Regardless of what those individual actions are, however, it's clear that we must have a national call-to-arms on this issue with at least four specific goals.

First – we must reduce energy demand. Every industrial sector, every residential sector, every appliance and auto manufacturer, and yes, every consumer must be encouraged – and rewarded – for reducing demand. Remember, the cheapest energy is the energy we don't use.

Second, we must pour more money into national research programs to make coal a more sustainable energy source while also increasing our work on renewable energy and alternatives such as bio- and nuclear energy. I don't believe that alternatives such as wind, solar or even bio-fuels are a panacea, but they do need more support than they're currently getting.

Third, we must diversify our energy supplies here in the U.S. Frankly, that means the inescapable truth that we need to increase our domestic supply of conventional energy like oil and natural gas by opening up previously restricted areas to development. Instead of paying for high-priced oil imports – which is the same as exporting dollars and jobs – we can use clean domestic supplies to fuel our own economy.

And finally, fourth, we must accomplish all of the above within the framework of reducing our impact on global climate change. If we do the first three and fail on this one, we still lose. Climate change must be forefront of mind and policy as we approach the energy issue.

If we don't act – and act soon – the window for proactive decision-making may close on us. And the final truth is that it doesn't have to end that way.

Those of you in this room know this better than anyone: this country is a “bigger-is-better nation.” It loves speed, it loves power and it loves size.

I believe if we capture that mind-set for big ideas and speed, tie it to a Pavarotti-like attitude of facing the truths, we can accomplish anything. Surely if this country can define and achieve – in less than one decade – a goal as lofty as putting a man on the moon and returning him safely, it can have an equally successful approach to our energy crisis.

This country still has the best scientists and engineers. Some of the best minds in the world are here, just waiting for someone to challenge them.

[Pause]

Since I began my talk with a quote from one musical great, let me end it with a quote from another.

There is a story that many years ago, the famous piano virtuoso Artur Rubenstein was asked to judge a competition among young pianists. Rubenstein obliged, but shocked everyone with his unconventional scoring. He gave a few of the competitors a perfect score of 10 – all others received zeros. Rubenstein explained himself by saying, “Either you can play the piano – or you cannot.” There is no middle ground.

Those of you in this room know that the same is true for manufacturing. Whether we're talking about the country or our individual businesses, we are either competitive – or we are not.

The challenge, therefore, for us – those of us in business and, particularly those of us in manufacturing – is to help the policy makers face this truth, too

Our path forward? To use the great optimism inherent in all of us to continue pushing for a better, more comprehensive energy policy. A policy that is not only good for us, but good for the climate and good for America's competitiveness, too.

Now that's a goal worth going after.

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