



## Restoring Competitive Advantage to U.S. Manufacturing

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Well, here we are the Friday after one of the most exciting and historic national elections in U.S. history ... and I am sure the Democrats are enjoying a well-earned celebration!

In case you forgot, it is still hurricane season. So it's only fitting that we sit today in the eye of a perfect storm. A new President Obama, with a strong electoral mandate; a financial crisis of epic proportions; congressional majorities skeptical of corporate interests; and a slide into a global recession. The agenda of the new president and Congress will become clearer over time.

And an important ray of sunshine is that the economy and jobs were indeed top issues on the minds of voters, and remain top issues for the people of America. That is a key platform on which we, as manufacturers, must find our voice as we seek to restore competitive advantage to U.S. manufacturing.

And that is what I'd like to talk to you about today.

As the financial meltdown should remind us pushing financial instruments around the world is not a substitute for making things. Our ability to make things in America, and preserve our place as the world's most indispensable nation, will largely depend on how we deal with two related issues - globalization and energy.

No question, most of us here today have been hit hard by these issues: tougher overseas competition, higher energy prices (with oil at \$147 a barrel a short while ago), and growing environmental concerns - especially in the area of climate change. And if that's not enough, the global credit crisis and its evil twin - recession - have served a one-two punch that promises to cut even deeper into our collective bottom lines. Housing starts are bottoming out. Consumer prices are topping out. People are earning less. And U.S. manufacturing continues to slide along with the economy. We've lost, in fact, around half a million manufacturing jobs since the end of 2006. And 3.7 million jobs in the past decade. Clearly, we can't stay "status quo" and wait for things to change - not if we want to survive, or I might add - thrive - in today's world.

Joseph P. Kennedy once said, "When the going gets tough, the tough get going." He's saying that the tough control what they can, and they make things happen. Well, we're tough and we can make things happen. As leaders of two of this nation's great industries - chemicals and forest products - we must join forces to drive change. Together, we must collaborate to ignite the success of this great nation, and to create a healthier, more sustainable future for our children. And



together, we must lead the charge to create comprehensive policies for manufacturing, energy, and sustainable development.

As you know, manufacturing is a vital economic pillar of this nation, and to any nation for that matter. Manufacturing employs about 14 million people who contribute about 1.6 trillion in wealth. It equals the eighth largest economy in the world. It has the largest multiplier effect of wealth than any other sector, driving one in six jobs in the private sector. It pays about 25% more than non-manufacturing jobs. It makes the highest contribution to economic growth of any sector. And it is responsible for more than 70% of private sector R&D – including the very technologies that address climate change.

I've personally seen how the growing presence of manufacturing brings prosperity and higher standards of living to emerging nations like China and India, and unfortunately, how its very absence is causing weakness in our own. You could say that our slide as a nation began with an "anti-industrial" policy - one that has seen the gradual shift of manufacturing assets and jobs overseas.

It's not that companies like Dow don't want to invest in America. We do. And, I'm sure you do too. But unfortunately, there are five key "anti-industrial" issues that are making it far too expensive, and even risky, to do business here - issues that add a staggering 32% to U.S. production costs versus our major trading partners. At the top of the list is the high cost of energy; followed by excessive corporate taxes (the second highest in the world); growing employee health care costs; costly regulation that actually inhibits innovation; and a deeply-flawed civil justice system that is in need of serious reform. Clearly, the challenges are many. And clearly, we need stronger collaboration among all stakeholder groups to remove those obstacles – public, private, Republicans, Democrats, industry, labor, NGOs, and the very grassroots of this nation.

I'd like to focus on the most serious obstacle of all and that is energy – and the related issue of the environment.

At Dow, we believe that providing humanity with a sustainable energy supply, while also addressing environmental issues like climate change, is the single most urgent challenge that our company and society face today. As all of you well know, energy is at the very nexus of manufacturing and human progress. Just look at two of the largest users of energy in this room today – the chemical industry and forest products. At Dow, we use energy to run our plants and to produce chemicals that are used in 90% of the products that people touch every day - everything from iPods and toothpaste to laptop computers and of course, pulp and paper processing

Likewise, in your industry, you use energy to produce the wood and paper products critical to construction, furniture, packaging, communication, containers, and more. In fact, you make thousands of household products that people touch every day too. And in many cases, your products and ours intersect: plastic-coated paper cups, magazines, specialty papers, coated



paperboard, and various forms of packaging are just a few of many examples. And because we are both such huge consumers of energy, we've also become great savers of energy too – leading the way in energy efficiency and conservation to improve our margins.

But, it's no longer enough. Energy prices have taken us on a fearsome rollercoaster ride. At Dow, we expect to spend about \$32 billion this year on energy and feedstock costs, despite our best efforts to conserve. That's four times what we spent in 2002, and in fact, more than the entire U.S. chemical industry spent in 2002.

And, while we've seen a precipitous drop in prices as the economy has slid, we know that over the long term, global demand for energy will exceed conventional supplies.

In fact, demand will likely increase by 50% to 60% by the year 2030, and 80% of that must be satisfied by fossil fuels - exacerbating concerns about climate change.

So the question to all of us becomes: How can we, as global citizens, ensure affordable and sustainable supplies of energy in the U.S. while also addressing world challenges like energy, climate change, water, food, and shelter? Granted, the challenge is complex, but it is solvable if we collaborate for success.

We can start by helping Washington and President Obama's administration understand that the energy crisis isn't just about energy, it is also about jobs, growth and manufacturing competitiveness. It is about so much more than the price of a gallon of gas. And despite the recent drop in oil prices, we can't let Washington back off. The fact of the matter is that Earth has a finite supply of fossil fuels, and we must act now to power the future.

This means working together to advocate for a long-term Energy Security plan that: promotes aggressive efficiency and conservation; increases and diversifies domestic supplies of oil, gas and coal, and supports responsible offshore drilling; and provides strong incentives to deploy alternatives and renewables - everything from solar and wind to biomass and safe nuclear energy.

For Dow, it also means forming partnerships that increase access to affordable feedstocks and energy. This quarter we will launch K-Dow Petrochemicals, a powerful joint venture with our Kuwaiti partners, to reduce our energy footprint while providing a stronger platform for future growth. We also have a cooperation agreement with Shenhua Coal in China, the world's largest coal company, to create a world-scale coal to chemicals plant. This will not only give us an advantaged feedstock position, but also provide economic benefits to the region in terms of jobs and growth.

On the alternative energy side, we are forming creative alliances to completely bypass fossil energy. Ten years ago we would not have even considered these options, but now they are a critical part of our strategy for growth and sustainability.



One of my favorites is our joint venture with Crystalsev in Brazil, to make polyethylene from the sun. For the engineers in here, I admit it is a little more complicated than that: the sun grows sugar cane, which we will turn into ethanol and then ethylene to make polyethylene, which is used in everything from food packaging to plastic pipes and milk jugs.

This is the first time a world-scale facility will be built using this form of “green” technology. It will not only reduce our energy costs, but also cut CO<sub>2</sub>, create jobs, reuse waste, conserve rainwater and reduce soil erosion. Dow and member companies of the AF&PA should collaborate too! While our two industries may compete on paper versus plastic, we are customers and suppliers of each other and we are allies in the cause to reduce waste, energy and CO<sub>2</sub>, and to create a more sustainable future.

I can think of several ways for us to collaborate, but one idea is to unlock the full value of biomass. Working together, we can apply the combined power of our technologies to get more value from things like black liquor, wood waste and mill residues, using it not only for biomass cogeneration, but also converting it to feedstocks for chemicals and plastics as well. In fact, the synthesis gas from the gasification of biomass is an excellent intermediate for most of the products Dow makes. Your waste stream today could very well become a car bumper or laptop computer tomorrow.

The opportunities to address the energy crisis are many, but moving the needle requires the will and commitment to make a difference. We at Dow, like all of you, take that commitment and our responsibility seriously. Not just to create value for our shareholders, but for society as well, and to do it in a way that delivers economic, environmental and social progress.

Mark Twain once said that, “Action speaks louder than words but not nearly as often.” Well, we at Dow are taking action as often as we can. Dow people - our Human Element - are committed to using chemistry and creativity to make the world a better place.

That passion is deeply rooted in our corporate history, and today it is embodied in a set of aggressive 2015 Sustainability goals that are posted on our web site. These goals reach far beyond the typical focus on environment, health and safety to provide innovative solutions to world challenges - like energy and climate change, clean water, healthy food, and affordable shelter. These goals call upon us to reduce our global footprint, and these goals focus on community success and partnership as well.

In Terneuzen, the Netherlands, for example, Dow partnered with the local government, a local water provider, and a local utility to re-use the city’s wastewater in our plants. This not only conserved water by reusing 2.6 million gallons of municipal water a day, but also enabled the utility to cut energy by 65%, which equals 5,000 tons of CO<sub>2</sub> annually.

It’s not only a win-win for Dow and our communities in terms of savings, but it’s also a win-win in that it tackles not just one but two global challenges - energy and water. And because you and



we need massive amounts of both, and because of our joint commitment to sustainability, it's only natural that we play leadership roles in delivering solutions. We are both very engaged in everything from renewables, recyclables and cogeneration to safety and security and trade policy. And we both have made significant progress in reducing our environmental footprints.

To that point, I read with great interest the AF&PA's Annual Report and saw that member companies have "collectively reduced their direct greenhouse gas emissions by 16 percent." In fact, you met - ahead of schedule - your commitment to achieve a 12 percent reduction by 2012. Congratulations to all of you.

Dow is moving the needle too, and we know it is not easy. We have, for example, cut energy intensity by 22% from 1995 to 2005 – enough to power 8 million U.S. homes for a year. We also reduced our Carbon footprint since 1990 by more than 20%. In fact, if Dow were a stand-alone country, we would exceed Kyoto targets by more than three fold. And, by the year 2015, we aim to cut energy intensity by another 25 percent while reducing GHG intensity 2.5 percent per year. Obviously, our two industries have a lot in common, which means we have many opportunities to collaborate for success.

Just as I speak internally to my marketing and sales colleagues about the need for collaboration to drive product innovation, it is obvious that collaboration at every level and sector of society - from Washington to Main Street – is at the root of all success. Collaboration is essential to our ability to restore the competitive advantage of U.S. manufacturing. Collaboration is vital to restoring North America as the premier economy for jobs and growth. And, collaboration is the foundation for creating a more sustainable world for future generations.

So, let's start the conversation. The time is now to work together to engage in the new administration. Let's take action to support an energy plan that stimulates investment and long-term growth. Let's advocate for policies that are "pro-industrial" yet corporately responsible. And let's jointly pursue biomass and other technologies that deliver mutual value to your companies, to my company, and to society as a whole.

Today, the U.S. Chemical industry and the U.S. Forest Products industry are world leaders. By joining forces and leading the charge where the major challenges of our day intersect - manufacturing, jobs, energy, and the environment – we can and will remain world leaders.

Thank you.