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Transitioning from the oil

On a recent visit to Novozymes North America, United States President George W. Bush stated that it was time to transition from the oil age and invest in a more sustainable future. Sustainability has been a mantra for Novozymes from the start, and the company underscores this commitment by supplying more than half of the enzymes used to produce ethanol in the USA.

Novozymes North America hosted President George W. Bush, members of the US government, invited dignitaries, other White House officials as well as the press corps and media on February 22, 2007 at Novozymes' offices in Franklinton, North Carolina.

The presidential visit

President Bush toured the company's production operations and research & development laboratories accompanied by Steen Riisgaard, CEO of Novozymes, and Thomas Nagy, President of Novozymes North America, with a specific focus on Novozymes' innovative cellulosic ethanol conversion technologies and commercialisation efforts.

Donning a white lab coat while visiting the laboratories, as per Novozymes' safety procedures, President Bush was taken through the process of creating fuel from biomass.

"Some day you're going to be using this in your cars. A lot of people are today,

but more and more are going to be using it. Fuel from agricultural waste - it may be hard for you to believe, it may be hard for Americans to believe some day we'll be taking piles of woodchips and using technology developed here to develop fuel for automobiles. And when that happens, that will make us less dependent on foreign oil and better stewards of the environment," said President Bush, holding up a bottle of fuel ethanol.

A presidential visit always means exposure, and Novozymes and the work being done there have been receiving a lot of attention from the media and the government since President Bush's visit.

"We're getting more requests to speak directly with senators, congressmen and their staffs in Washington about our bio-fuels research, we're participating in various state and government panels, we're getting more credibility within the business community, and our work is being recognised," says Garrett Screws, Senior Manager of Governmental Relations at Novozymes.

US President George W. Bush arriving at Novozymes North America in Franklinton, North Carolina.



age to a more sustainable future

"It was a fantastic and slightly surreal experience to have so much press, secret service and the President of the United States at the place you work. We were excited and proud to be part of this. You don't get to say things like 'I have the White House on the phone' in your average work day. I still have the number of Marine Corps One on my cell phone."

Building a sustainable future

Bioethanol and biomass-to-ethanol industries are garnering attention from the United States government and are central elements in President Bush's plans to reduce dependency on imported foreign oil.

"Henry Ford's original Model T was designed to run on ethanol fuel. But subsequently the US built a motor fuel system based on the availability of cheap sources of petroleum. Now that we are again in transition from the oil age, it is time for us to invest in a more sustainable future," said President Bush.

Novozymes, the world leader in industrial biotechnology, has been instrumental in revolutionising the production of transportation fuel through the application of its enzyme technology for ethanol, based on both corn starch and, in collaboration with the Department of Energy and the National Renewable Energy Laboratories, on agricultural residues such as corn stover.

"Novozymes supplies more than half of commercial enzymes used to produce the 5 billion gallons of ethanol in the USA. Today, biofuel still only makes up 3-4% of America's gasoline consumption, but together we see much larger potential," says Steen Riisgaard.

Strategically, Novozymes is mobilising its global resources to continue delivering critical and integrated technologies to improve the efficiency and economic viability, and to accelerate growth of the bioethanol industry while remaining committed to its strong sustainability and environmental philosophies.

Hands-on experience

During his visit, the President hosted a panel discussion with Thomas Nagy and Dr Kevin Wenger, who leads the NC-based R&D team which, together with Novozymes' Davis-based protein engineering facility, successfully reduced the enzyme cost of converting biomass (in this case corn stover) into fermentable sugars for fuel ethanol production. The round-table was attended by official guests and more than 200 Novozymes employees.

"On behalf of our Board of Directors and all of our 4,500 employees globally, we are both humbled and proud that President Bush accepted our invitation to visit Novozymes to experience first-hand the

work being carried out by our researchers to accelerate and support the traditional and burgeoning cellulosic ethanol markets," said Thomas Nagy.

Steen Riisgaard took this unique opportunity to share the Novozymes perspective on the use of alternative energy with the President and thanked him for his continuous cooperation and focus on developing sustainable solutions for the future.

"We discussed with President Bush the importance of enzymes as a critical tool in making ethanol a commercially viable alternative energy that can make the world less dependent on oil. Using enzymes in the production of renewable fuels is the most sustainable way to cut production costs, decrease investment needs and reduce pollution," says Steen Riisgaard. ●

To learn more about President George W. Bush's visit to Novozymes North America, please contact Yokima Cureton yokc@novozymes.com

You can also get more information about biomass and fuel ethanol at www.biomass.novozymes.com