Clean Water Opportunities & Challenges

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I'd like to express my gratitude for being invited to join this panel. As part of the Chemical Industry, I applaud USIBC in talking about the single most important chemical compound known to mankind – "WATER."

And, while I represent Dow, being here for me is personal, as well, like it is for many of you.

I have 2 daughters, 1 beautiful grandchild and another on the way. I would like all of them – and tomorrow's generation as a whole -- to enjoy life and all that it has to offer.

But that requires clean water and all of the benefits it brings, such as food, health, and economic progress.

Growing up in the United States, I took clean water for granted, as many did and still do.

But, that perspective changed when I lived in Brazil in the 90's. Our food had to be washed with tap water … which we had to personally treat with chlorine ... because we couldn't trust the quality of the water. This experience showed us, in practical terms, how "precious" clean water really is.

That's a small inconvenience, though, when compared with the 1.2 billion people who don't even have a choice. They can't get their water treated. And many can't even get water period.

The sad part of this … is that people do not have to go without water. Granted, the issues are complex and diverse. But, this challenge is solve-able. The technology already exists. And that is the inspiring part of today's debate.

Solving the problem of water comes down to two main drivers: Global Collaboration and Will.

We need collaboration between all of us, whether in the private or public sectors, to ensure sustainable supplies of water. And together, we need to take an integrated approach that goes beyond just technology but includes water usage, management, delivery, infrastructure, finance, and education … the entire supply and delivery chain.

And, like most world challenges, success also takes a heavy dose of will.

As it is commonly said: "If there is a will there is a way."

- Government, for example, must have the will to drive policies that make sense … policies that ensure affordable water and are integrated across all domains.

- Society must have the will to conserve and re-use existing supplies, while devoting the effort to match specific needs to sustainable solutions. It is truly a mind-set "shift."
- And businesses must have the will to create technology solutions that make money, while including "clean water" in their Corporate Social Responsibility programs. Businesses and industry must be the "Innovators."

We at Dow – like all of you – are taking this responsibility seriously. Our 2015 Sustainability Goals, for example, are focused on delivering breakthroughs to key world challenges – including clean water.

We've reduced waste water in our own plants globally by 38% since 1994 – despite production rising by 32%. We did this through conservation, technology and operational excellence.

And, we are using all of the tools at our disposal to drive results externally as well … from innovative Dow technologies … to venture capital and creative business models … to philanthropy, advocacy, and partnerships.

As early as 1985, we created a focused water platform in which we dedicated time and resources to what we felt was a need of society – water management.

Today, our Dow Water Solutions business, as it is known, is focusing all of our technologies squarely on the problem of fresh water scarcity. These technologies are centered on desalination, purification, water re-use, and efficiency.

Our FILMTEC™ membrane technology, in fact, is enabling a desalination plant in Perth, Australia, to serve more than 200,000 residents – the largest de-sal project in the Southern Hemisphere. FILMTEC membranes were also used at the Beijing Olympics, enabling the organizers to achieve a wastewater re-use rate of 50 percent.

What's really neat, is that our technologies are also saving energy. For example, in Terneuzen, the Netherlands – Dow partnered with the government and a local water provider to re-use the city's wastewater in our plants, not 1X or 2X, but 3 times. This, in turn, enabled the local utility to cut energy by 65% -- which equals 5,000 tons of CO2 annually.

- We're also forming creative partnerships in countries like India. As an investor in Water Health International, Dow has provided a $30 million loan guarantee to deliver fresh water systems to villages. In addition, Dow India is preparing to install water purification plants across 15 villages in Gujarat using reverse osmosis technology. (This is part of our Corporate Social Responsibility initiative, and the first three such plants are being commissioned this month. Also, several educational sessions about the importance of clean drinking water have already been held … with more than 1,000 villagers attending.)

The list goes on … but more importantly, it shows that when you have the Will and make it a priority… when you Collaborate … and when you take an Integrated Approach to clean water, you can make a huge difference.

And that is why we are here today. It will be the “Human Element” that will differentiate us from our forefathers – it’s all about people helping people.

I truly look forward to discussing some of the key challenges and opportunities ahead of us… in order to paint a more sustainable future for all of us.

The solutions to India’s water problems are known – either in technology, business model, or financial structure … somewhere in the world. To solve this challenge will take the will of government, society and Industry to collaborate toward finding these sustainable solutions.

Thank you.