

Summit on the Slopes: Session Three Recap

By Nick Parkinson
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Heineken's Nicolas Clerget and The Coca-Cola Company's Rohit Thawani told gasworld's CO₂ Summit about their end-users' experiences in entertaining presentations here in Innsbruck, Austria.

A sell-out event of 140 delegates heard how the drinks industry giants coped during the carbon dioxide (CO₂) shortage last year in the final session of Summit On The Slopes.

Session three – chaired by Dr. Graciela Chichilnisky, CEO and Co-Founder of Global Thermostat – focused on applications and utilisation at the Interpalpen Hotel Tyrol in the heart of the Austrian Alps.



Dr. Graciela Chichilnisky, CEO and Co-Founder of Global Thermostat

During the afternoon session, Dr. Chichilnisky also gave an introduction to New York-based Global Thermostat, the Summit's gold sponsor, which is commercialising its advanced, multi-patented technology to transform CO₂ from a global liability into an immense profit centre.

Dr. Chichilnisky explained Global Thermostat's technology which economically captures and concentrates CO₂.

"Limiting emissions doesn't suffice, we have to remove the CO₂ that is already there," Dr. Chichilnisky told the gasworld CO₂ Summit.

Gary Robson, Head of Sales at Unisensor Sensorensysteme GmbH, Sure Purity Ltd, provided an insight into the purity of CO₂ for beverage production.

"Quality is really beginning from the start, to the end, and that means the raw gas and feedstock," Robson told the **gas**world CO₂ Summit.

"It means close cooperation, frequent communication with the company at the source and gas producer."

On addressing what the future holds, Robson's conclusion included, "Focus on source specific impurities and how these can affect the CO₂ manufacturing process and finished product quality. I think this is a big development."

Then followed insights from high-profile end-users Heineken and The Coca-Cola Company.



Rohit Thawani, Global Procurement Director at The Coca-Cola Company

Nicolas Clerget, Global Category Lead – Renewable Energy & Brewery Material Services at Heineken, led a cross functional team in the UK during the CO₂ shortage in Europe last year to ensure the beer company kept producing.

Clerget told the **gasworld** CO₂ Summit he started at Heineken just when the story on the CO₂ shortage broke in June 2018.

“We had to come up with a plan, and we asked how much do we need and the estimated demand was 450 MT per week,” Clerget said.

“We had a large network in Europe so we started to think how we could ship CO₂ to the UK. On day five, we started to get a plan and had good news from the suppliers. Heineken contacted 50 transport companies to get trucks in place. Day six, and we estimated demand to be 350 MT per week, and 18 trucks per week.”

Clerget added that by day 19, Heineken had resolved the crisis.

“Looking back, we should’ve listened to the early signs in the industry and realised that CO₂ is a by-product and you can’t be in control of your supply. But we were able to manage our CO₂ and offer it to our breweries.”

US-based Rohit Thawani, Global Procurement Director at The Coca-Cola Company, spoke about his experiences in 23 years at the carbonated soft drinks giant, including last year's crisis. Thawani began by thanking suppliers for their help during the crisis.

"Thank-you very much to the suppliers, because they deserved that," Thawani told the **gasworld** CO₂ Summit.

"Coca-Cola sells two billion drinks per day. Everyone has heard of no fizz in our biz. CEOs of companies like McDonald's would be calling us asking if we were going to deliver. As an end-user I will always be demanding, unreasonable, and I will not know what I want. Despite all of this we will always have to deliver. We would appreciate increased transparency from the industry."

The final session saw Robert Niven, Founder and CEO of CarbonCure Technologies, enlighten delegates about utilisation technologies.

Canada-based CarbonCure Technologies, which converts CO₂ into a range of commodity products, works in the concrete market.

"Problem with cement and concrete industry is that it's high carbon intensity and we're trying to reduce that carbon footprint," Niven said.

"Concrete is the best market to be looking at CO₂ utilisation and CarbonCure is on target to meet our mission of 500 MT/year avoided CO₂ impact. We are expanding abroad too, in Singapore and Europe. CarbonCure serves more than 130 plants in Asia and North America, mostly in US and Canada, since 2015."

Niven added, "We are really on this kick right now to see how fast we can expand and finding partners to that. It frustrates me when people say CO₂ utilisation is something for the future - it is happening now."



Stephen B. Harrison, of sbh4 consulting

Stephen B. Harrison, of sbh4 consulting and gasworld contributing writer, focused on greenhouse CO₂, food, agriculture and hydroponics.

Harrison said, " CO₂ injection into greenhouses compliments other 'green' greenhouse technologies. This is a large scale CO₂ application is maybe using 60 tonnes per day. Beyond plant crops, CO₂ is used to promote algae growth. Algae is harvested for nutrition and healthcare products. Desert greenhouses in the Middle East and Australia are a growth phenomenon and require CO₂, but not so much heat."

As part of his presentation, Harrison gave out tomatoes which had been grown using CO₂ and geothermal energy in Germany.

Harrison concluded, "I see a huge demand for growth of greenhouses and CO₂ consumption."

After a Q&A session, the Summit closed with time for delegates to visit the Expo and network, before dinner.