

**Remarks by Jeff Seabright
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**“Refrigerants, Naturally”
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It is a real honor to be here in Brussels with so many leaders on global environmental action.

And it is particularly encouraging to be here with companies, indeed whole supply chains, national governments, international organizations and NGOs who have come together to shape a common vision based on innovation, environmental stewardship, and commercial practicality.

The magnitude of the climate change challenge demands no less.

Without question, I am here today because four years ago, our Chairman and CEO, Doug Daft, articulated a vision and gave the Coca-Cola company, its bottlers and its suppliers a new, bold challenge:

Could we commit ourselves to devise, by 2004, an alternative HFC-free technology, capable of being mass produced in a cost-effective manner, so that our system could adopt it and move away from HFCs?

The Coca-Cola system – which includes franchise bottlers as well as operations owned by The Coca Cola Company -- has some 9 million coolers and vending machines in the marketplace worldwide. The vast majority of these use HFCs, a greenhouse gas, as refrigerants and in insulation foams. And, of course, this equipment also generates indirect greenhouse emissions through electricity use.

To put things in perspective, we estimate that our business system comprises only 1% of total compressor sales and less than 0.2% of total HFC sales worldwide. Yet our brand value and leadership

position in the market demands that we demonstrate excellence in all we do – and to show the way on environmental issues. Innovation is central to our business model, and we are proud to be playing a role in the evolution of environmentally-friendly refrigeration.

We recognized the need to take responsibility on refrigerants early on. When CFCs were identified as contributing to the destruction of the ozone layer, we were one of the first to move out of this damaging technology. More than 10 years ago we decided to move to an ozone-friendly alternative for new equipment, and much of the world followed suit. However, HFCs, the alternative chosen by the global community, have a strong global warming potential, something that was not understood then as it is today.

And this led us to announce our HFC-free vision in 2000.

Reducing direct global warming impacts by moving away from HFC-based refrigeration systems and insulation foam is only part of the picture - and only part of our vision. Cooling equipment also uses electricity and that electricity use generates greenhouse emissions from power plants.

It would be counterproductive to move out of HFCs, if the alternatives use more energy. Just as we should not allow current energy efficiency to be used as an argument for prolonging HFC use, so, too, we cannot allow alternative refrigeration to be bought at the price of increased energy use.

This is why our challenge addresses both elements. *We shall be moving out of HFCs but we will also ensure that by 2010, our new equipment will be between 40 and 50% more energy efficient than the machines we used in 2000.*

We were not alone in our thinking on more environment-friendly refrigeration. In 2000 Greenpeace urged us to take positive action on “climate-friendly” refrigeration. We listened to them and we have been impressed by the depth of their understanding not only of environmental issues, but also of the complexities involved in technology development and industrial change. Responsible NGOs

and responsible companies can work together to create environmentally responsible sustainable business propositions.

Other companies, like Unilever and McDonald's, have been moving in the same direction, too; and we have joined with them here today. All of us need to acknowledge the great work that suppliers and development partners in our supply chain have done in accepting the challenge, overcoming the technical difficulties, and enabling us to reach this important moment. Compressor manufacturers like Danfoss, Sanyo, and Sharp; component manufacturers like Norsk Hydro and Modine; system integrators like Frigoglass, Sanden, and Fuji have all worked to make this outcome possible.

Today we can say that our company's vision of a reliable, energy-efficient, HFC-free, commercially viable refrigeration system is becoming a reality. In laboratory tests and in the initial field tests our innovative systems so clearly meet our performance needs that we are now moving to wide-scale commercial trials all over the world. The challenge is being met.

Today, I can reaffirm that the Coca-Cola system will, indeed, adopt refrigeration systems that do not use HFCs in refrigerant or foam and that, by 2010, will be 40-50% more energy efficient.

We believe we can make a difference; but we can make an even bigger difference if we can work with others to the same end. The alternative refrigeration systems that we and our partners have developed will be available to industry as a whole. This critical initiative will be a real success only if other leaders in the industry join us. We need to move the world's refrigeration systems towards a more sustainable future, and we need to do it together.

Different players will have different needs, which is why the afternoon program and the exhibition will address various technologies. We are not advocating any one in particular for use by all industries. Each technology option has different characteristics and they are not all equally capable of meeting individual needs. This whole process is about meeting the world's needs for cooling in an effective way that faces up to the perils of climate change. It is, in a word, all about results.

When we announced our 2004 challenge, many believed we would not be able to meet it. Indeed, it was not a matter of just shifting to a new standard available off the shelf. There was no HFC-free alternative able to meet our performance and safety standards, in a cost-efficient way, for the wide variety of our equipment needs.

Our equipment is not like standard home refrigerators. Vendors and cabinets are typically much bigger and therefore require more refrigerant gas. They need to cool our products quickly, so that our consumers can enjoy them ice-cold. Our coolers are opened much more often than a home fridge, and need to be able to withstand wind, rain, and hot weather, while still getting the purchaser an ice-cold beverage reliably and consistently. Some equipment, notably vending machines, has complex electronic circuitry.

To address all these factors, we created a program, which we called **eKOfreshment**. In it, we looked at all emerging technologies to understand which ones were potentially suited for our needs and which ones had the most chance of becoming commercially available in the short term. We looked too at the technological gaps and we assessed the possibilities of getting costs to a level that would make them a viable business proposition.

We pursued more than 10 technology options, including Peltier and thermoacoustics, and eventually narrowed our search to three main technologies most suited to our needs: Hydrocarbons, CO₂ and Stirling. All these candidate technologies seemed to have the potential to provide reliable, efficient, and practical cooling. The practicality was crucial, not only for the Coca-Cola Company's own purposes but for our ability to influence others to invest in the new technology.

Hydrocarbons were the basis of a fairly mature technology, already used for domestic refrigeration in many countries. The challenge there was not so much how to develop hydrocarbons but rather how to address operational, safety and service issues and how to identify HC-solutions for large units that typically require charges that in many places are not allowed by regulations.

CO2 is a promising technology, whose potential was well understood. However the issue was how to produce a compact, cost effective system, and how to ensure that it would cool in an energy efficient way.

Finally, Stirling was considered just a niche technology, used for a long time for cryogenic applications. It is a totally different refrigeration system, which is very energy efficient and uses helium as a refrigerant.

On all three technologies, we partnered with technology providers and equipment suppliers, we analyzed the technology gaps and, together, we worked hard to find ways to fill them.

Our research and development effort cost some US \$10 million and our suppliers spent more than double that amount. Many patents have been filed and many technological breakthroughs have taken place, ranging from dynamic pressure control systems, to expansion valve technology, from advanced heat exchange technologies to advanced simulation models.

All three technologies proved to have a variety of technical and commercial merits and potential application to our equipment.

Once all the technology issues had been tackled, we embarked on a comprehensive series of lab tests and field tests of these refrigeration technologies. We assessed their performance, their ability to meet our needs, and their ability to reduce energy use. Finally we decided which one offered us the best option for commercial roll-out, in terms of reliability, energy-efficiency, cost, environmental profile, ability to cover all our equipment sizes, and possibility of global commercial availability.

And I especially want to acknowledge the members of the Coca Cola eKOfreshment team here today -- Mike Masters, Darren Simmons and Bryan Jacob from Atlanta and Salvatore Gabola based in Brussels.

And so to today. After four years' work, our visionary challenge is about to become a commercial reality; and today, our top

management team is fully committed to its successful implementation.

You will hear this afternoon from our partners the details of the technologies I have mentioned, how they work, and our experience in dealing with them. Let me now turn to Coca-Cola and how we intend to proceed.

On the basis of the work done over these past four years, we have come to the conclusion that CO2-based refrigeration is currently the best option for the global needs of Coca-Cola's sales and marketing equipment – our coolers and vending machines. CO2 is a natural gas, it is safe and non-hazardous, and its global warming potential is dramatically less than HFCs.

CO2 systems in our tests proved to be reliable and performed according to our specifications. They are currently capable of meeting our needs for medium and large units - the majority of our purchases – and availability for small equipment is within reach.

Our preliminary field tests also indicate that, in real life circumstances, they use less energy than equivalent equipment using HFC as a refrigerant. We believe that use of CO2 refrigeration technology puts us in a good position to achieve our 2010 goal of 40-50% greater energy efficiency.

Manufacturers like Sanyo and Danfoss have been working hard at optimizing these systems and have clear plans for moving to the commercial phase, ramping up production as early as 2005. We are working with them and with integrators to embed them into refrigeration cassettes able to fit our standard equipment. You will hear them this afternoon detailing these efforts.

Field tests are already taking place. CO2 units are already in the field, as we speak, in Spain, Japan, Greece and Australia and we are planning to expand these field trials this year. More than 650 HFC-free units (50 of which are CO2) will be placed in the Olympic venues in Athens this summer.

Large-scale field tests led by our bottling partners throughout the world will be crucial for our success. Commercial roll-out plans for CO2 refrigeration systems will be part of our business planning discussions with our bottling system this year and next, and we will begin the transition as commercial units are made available to us at competitive prices.

It is not easy to make a precise estimate of the likely pace of our commercial roll-out – as we depend on the output of compressor and equipment manufacturers. Their ability to deliver will, in turn, depend on their own investment decisions and the building of mass-manufacturing lines. Also, our bottlers clearly need time to move to the new standard in an orderly fashion and to understand it in the appropriate way.

We are seeking to strike the right balance between rushing into a new technology too fast which might endanger its future prospects, for us and for other potential players, and moving too slowly so that the momentum is lost. We know the technology is becoming available and we are serious about putting it to good use. But it is still in its infancy and we need to roll it out appropriately - as fast as possible, but as slow as necessary.

We and our bottling partners will be able to begin purchasing significant numbers of CO2-refrigerated equipment within the next couple of years, thereby beginning a steady transition, over time, to HFC-free coverage for our new equipment worldwide. Continuing our policy of transparency and openness, we will be sharing our progress in this transition.

But let's be clear: the challenge will be met. We are ready to begin transition – large scale field tests and subsequent commercialization. This message is first and foremost for equipment manufacturers, without whom we cannot be successful. We will work with them in view of stepping up their capabilities and investment plans for CO2 refrigeration.

We also encourage other users of refrigerated equipment to join us. Widespread industry adoption of CO2 technology will help build the manufacturing infrastructure and financial conditions to facilitate this

transition. The benefits are clear for all industry players. It is truly a mutually beneficial proposition.

Additionally, in 2000 we pledged to move out of HFC in foam. As of today, some 50% of our suppliers worldwide have already switched out of HFC foam. After the end of this year, only equipment using non-HFC-blown foam will be certified for purchase in the Coca-Cola system.

We estimate that the combined effect of these measures will ensure that new sales and marketing equipment purchased by the Coca-Cola system in 2010, will emit (directly and indirectly) 700,000 tons less of CO₂-equivalent greenhouse gases than would otherwise have been emitted by sticking to the models we had in 2000. This is the equivalent of 150,000 fewer cars on the road or 200,000 more trees sequestering carbon.

This afternoon you will not only hear about CO₂. While CO₂ represents today the best option to meet our global refrigeration needs, we and our partners have developed a much enhanced future for Stirling refrigeration. Stirling has long been considered the exciting new thing that would never happen and many thought that no working prototype would be possibly built for another decade.

Together with our partners, we have made enormous progress and you will see in the exhibit area a prototype that is currently being field-tested in Japan – and might be commercially viable in the not too distant future. We are confident that Stirling may represent a real, very efficient alternative over time. Our first tests indicate that already today it performs well in small equipment – a smaller segment of our equipment size range, but an important size for many other companies and applications.

The Coca Cola Company has brought to the challenge of sustainable refrigeration the same dedication to excellence and innovation that has made it one of the world's leading companies. There are no short cuts or quick wins to the grueling tests that alone ensure long-term and effective commercialization.

That's why this is so significant a contribution to meeting the needs of a world faced with the huge challenge of climate change. We are honored to be leading the way, together with all our partners and stakeholders – from Greenpeace to our own bottlers. Our future success depends upon that continuing partnership. It is that which we celebrate today.

Thank you.