



ATMO  
sphere

business case

natural refrigerants

16 May, 2016 — Melbourne



# Welcome & Introduction

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**Marc Chasserot, Chairman ATMOSphere**

CEO shecco

Australian & NZ industry can lead the world in NR

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Policy is an important driver

OPSGGM, EU F-Gas, CARB, Montreal Protocol, Japan subsidies

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More NR solutions are available for different applications, incl. warmer climates

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More end-users announce NR are a now standard in new equipment

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Competition increases:  
from low-GWP HFC refrigerants

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Natural Refrigerants still a 'niche'  
= +/- 10% Global HVAC&R

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“mainstreaming” of Natural Refrigerants  
will not happen by itself

→ **Pro-active approach** ←  
**is necessary**

Raise Awareness: Training & NR Label

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Reduce Costs: Lower capital costs, new business models, incentives & subsidies

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Increase Availability: Components, Systems, Services, integrated approach, natural refrigerants for AC, high ambients

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Innovate and invest in R&D to fill the gaps







Life Is On



ENGINEERING  
TOMORROW







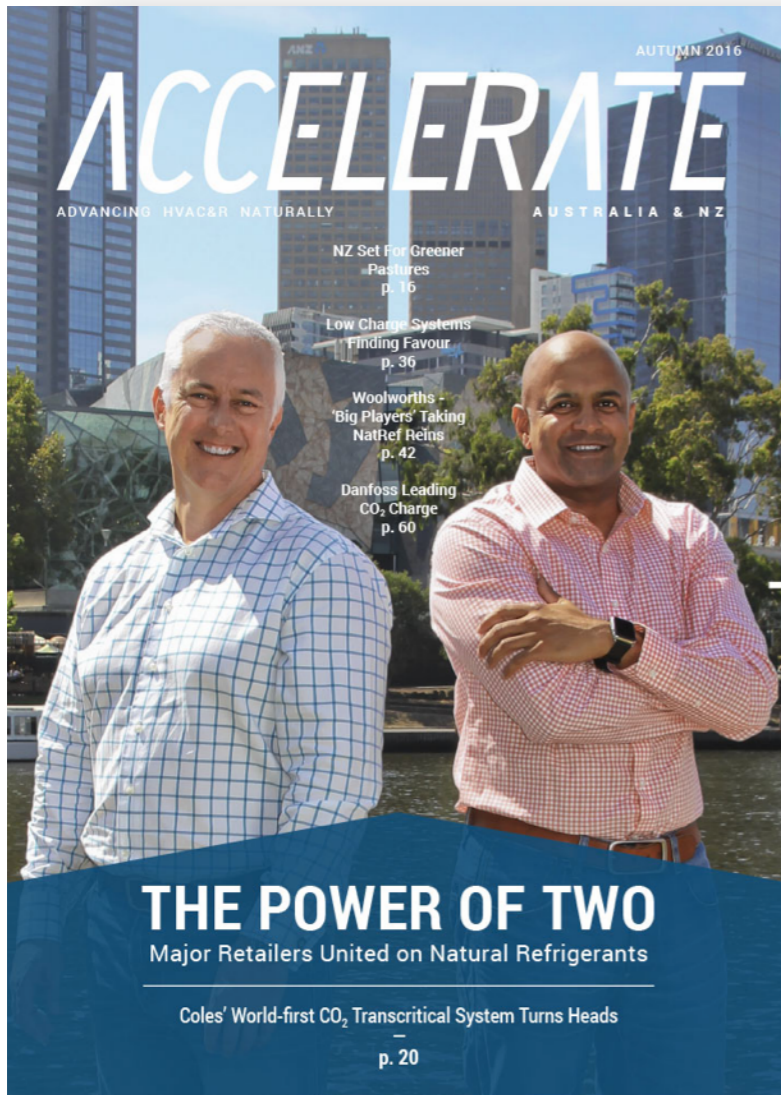
# *Accelerator* of natural refrigerant based technologies





**MarketResearch & RegulatoryAffairs**

**Projects United Nations, Europe & Global**



quarterly news magazine about natural refrigerants for Australia

about the **most progressive business leaders** working with natural refrigerants in all HVAC&R sectors

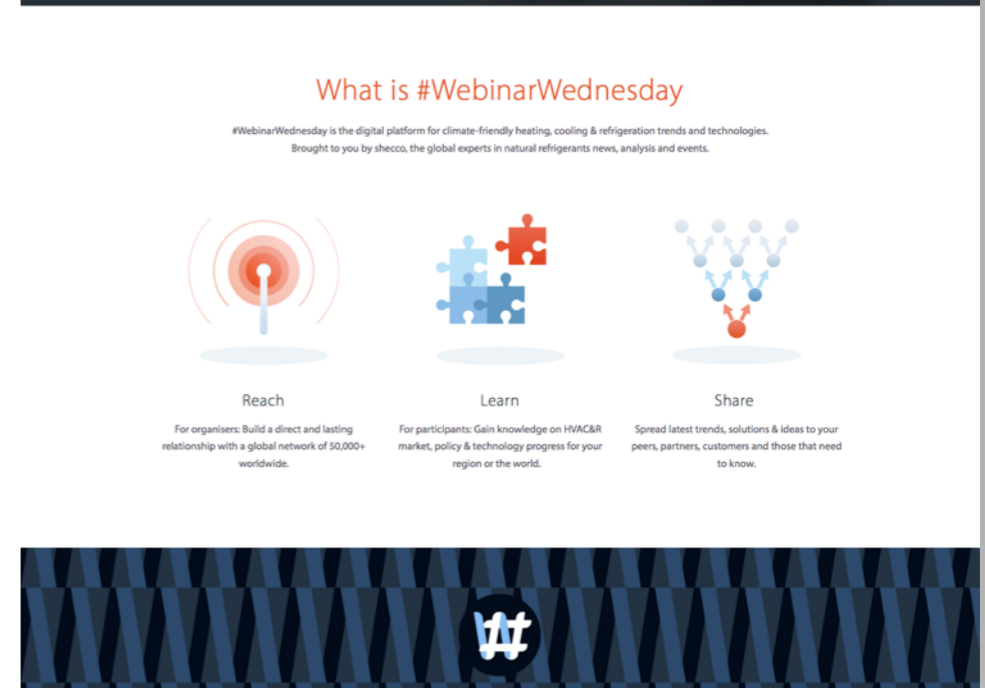
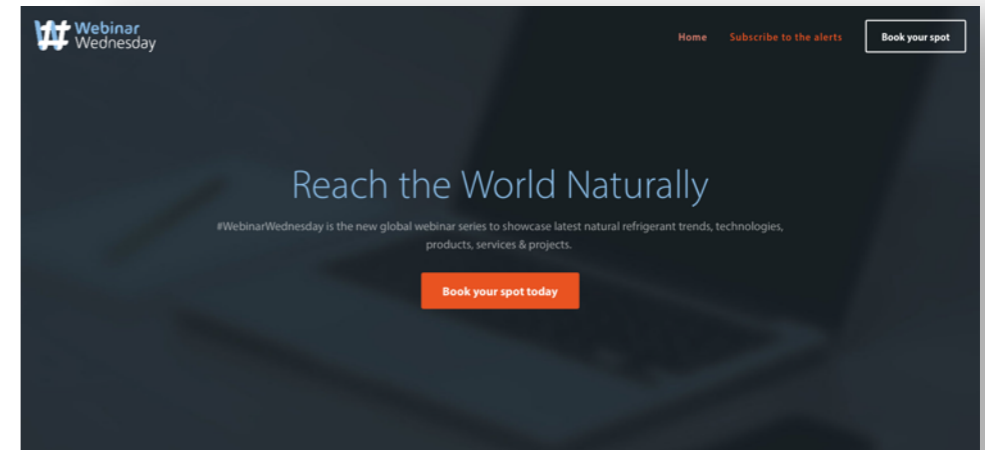
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the new global webinar series to showcase latest natural refrigerant trends, technologies, products, services & projects.

build a direct and lasting relationship with a global network of 50,000+ worldwide.

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-  News
-  Sponsors
-  Presentations
-  Pictures
-  Report
-  Programme
-  Register now


**34 events**


**683 speakers**


**5370 attendees**




 Event details


 News


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 Programme

 Register now

All presentations

will be added to

[www.ATMO.org/Australia2016](http://www.ATMO.org/Australia2016)





**Reception & Networking Dinner**

*Monday, 16 May - 19:00*

*Bobby McGee's Entertainment Lounge  
(1st Floor)*



Participate to the discussion on Twitter  
by tagging your tweets with the hashtag

**#ATMOAus**

**@ATMOEvents**



Wifi Login: **Rydges-Guest**

Wifi password: **Melbourne**



The conference series debut in Melbourne features a programme jam-packed with policymakers, market experts, and industry leaders.

Summary of ATMOsphere Australia 2016 will be created on Storify, including all news posted on all shecco Media brands.

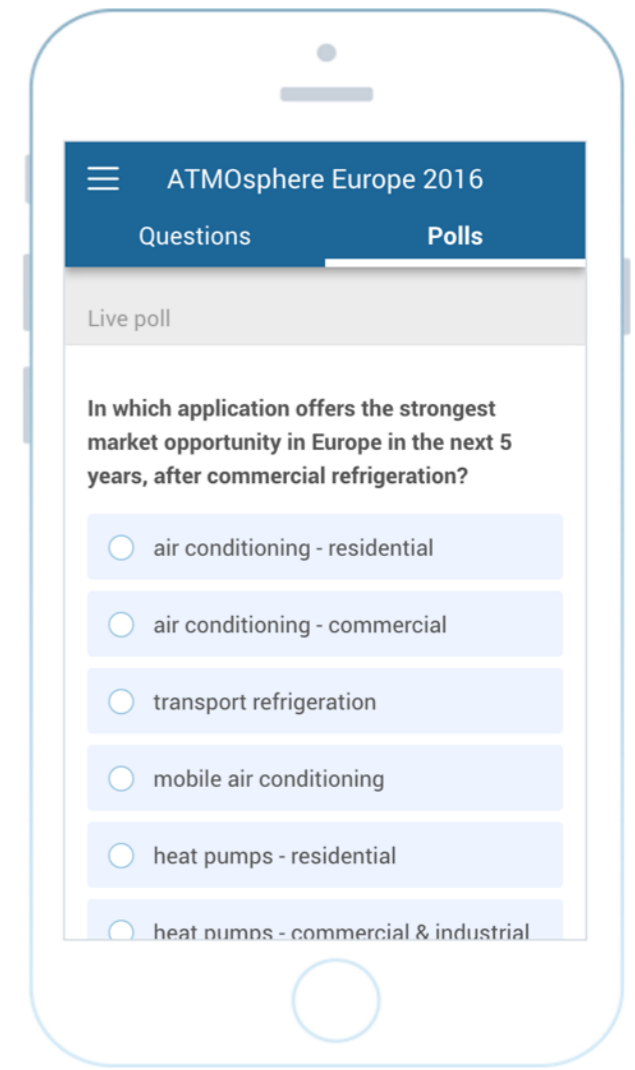
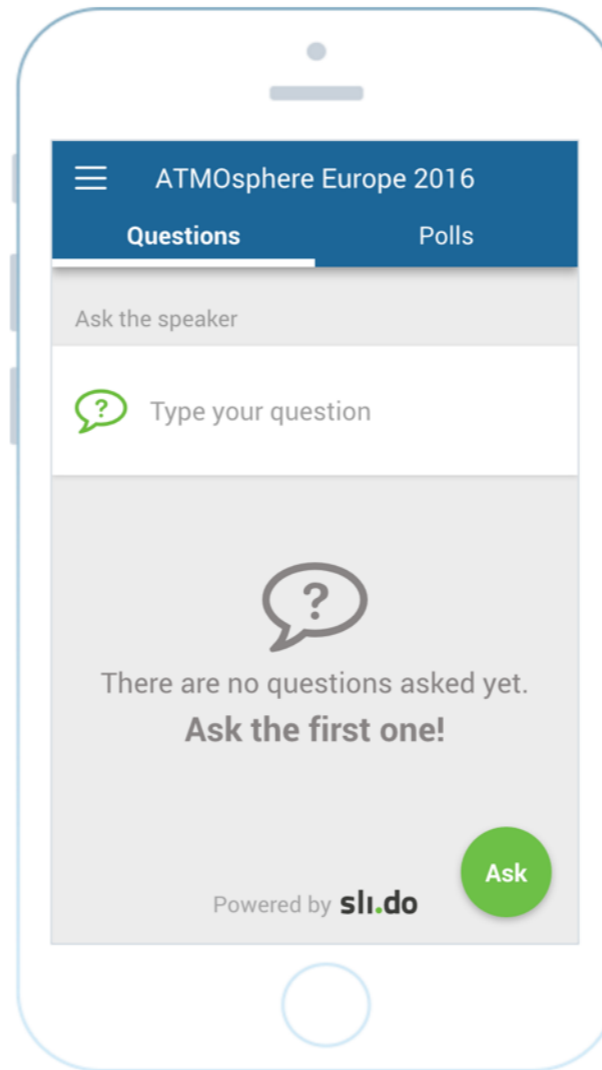


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# Programme

*16 May 2017*

## POLICY PANEL

09:10 Presentations by government and industry experts on the latest regulatory issues and standards for natural refrigerants at Australian/New Zealand and international dimensions.

**Chair: Marc Chasserot, shecco**

**Patrick McInerney, Australian Department of the Environment**, HFC phase-down policy issues

**Klara Skacanova, shecco**, Natural refrigerants in the world - policy and market trends

## MARKET TRENDS

09:45 Leading industry representatives will give strategic and visionary presentations sharing their latest success stories, lessons learned, challenges and next steps with regards to natural refrigerant based technologies in Australia, New Zealand and beyond.

**Chair: Jan Dusek, shecco**

**Ian Suffield, BITZER**, Innovative cooling solutions

**John Bolger, Mitsubishi Heavy Industries Air-conditioners Australia (MHIAA)**, Introduction of air to water heat pump that utilises Natural Refrigerant R744

**Hideyo Asano, Mayekawa**, Our natural refrigerant technology and energy-efficiency solutions

**Robert DeVentura, Heatcraft Worldwide Refrigeration**, An industry in change

**Peter Bao, Advansor / Hillphoenix**, Transcritical CO<sub>2</sub> solutions for warmer climates

10:45 Q&A with audience

11:00



Coffee / Tea networking break - sponsored by CAREL Industries & Emerson Climate Technologies

## HVAC&R ASSOCIATIONS PANEL

11:30 In this session we will open the floor for all influential HVAC&R associations in Australia and New Zealand to share their experiences working with natural refrigerants, to speak about new opportunities, policy and technical barriers and the latest developments from each industry body to accelerate the adoption of natural refrigerant technology.

**Chair: Marc Chasserot, shecco**

**Tim Edwards, ARA, Change 2016**

**Phil Wilkinson, AIRAH, AIRAH and PRIME promoting a whole HVAC&R industry pathway to a low emissions future**

**Matthew Darby, CCCA (NZ), Overview of New Zealand industry action to support safe management of refrigerants**

**Gregory Picker, Refrigerants Australia & AREMA, New working group to identify barriers, opportunities and clear path forward for natural refrigerants**

**Kim Limburg, ARMA, Implementing national licensing system including refrigerants to meet global standards**

**Kevin O'Shea, RACCA Australia, RACCA's position on natural refrigerants**

12:15 Q&A with audience

12:30



Networking Lunch - sponsored by Hillphoenix & Mayekawa Australia



## END USER PANEL

14:00 Key end users will share their experiences using different types of natural refrigerant technologies including benefits, challenges and future plans in commercial and industrial refrigeration applications.

**Chair: Marc Chasserot, shecco**

**Michael Englebright, Woolworths, Our Journey to Natural Refrigerants**

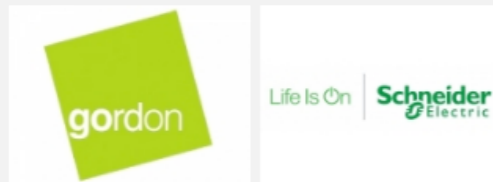
**Greg Lewis, Countdown, Experience with the first CO<sub>2</sub> TC system**

**Stuart Saville, COLES, The path forward**

**Hiroshi Soma, Chemical Grouting, Ground freezing opportunities in construction works using NH<sub>3</sub>/CO<sub>2</sub> in Australia and NZ**

15:15 Q&A with Audience

15:30



Coffee / Tea networking break - sponsored by Gordon Brothers & Schneider Electric

**TECHNOLOGY CASE STUDIES IN HVAC&R**

16:00 This session will present some real-life examples of how natural refrigerants are applied in all HVAC&R applications. Leading suppliers and technology pioneers share their latest projects and product innovations, covering best practices, lessons learned, efficiency and cost analysis, as well as next steps.

Participants will be able to choose from the following parallel break out sessions:

**Commercial Refrigeration**

**Chair: Ian Suffield, Bitzer**

**Ian Suffield, Bitzer**, CO<sub>2</sub> transcritical combined cooling package

**Masood Ali, Heatcraft Australia**, Ultra-low charge NH<sub>3</sub>/CO<sub>2</sub> cascade system in a retail environment

**Klaas Visser, KAV Consulting**, Applying CO<sub>2</sub> for all HVACR applications based on energy consumption of 800 Australian supermarkets

**Ian Garvey, Carter**, Self contained display cases with a hydrocarbon refrigerant running on a water loop for heat rejection

**Mirko Bernabei, SCM FRIGO**, Transcritical CO<sub>2</sub> technology for retail solutions in Australia and New Zealand

**Wynand Groenewald, Commercial Refrigeration Services**, CO<sub>2</sub> transcritical systems operating in high ambients

**Matthew Darby, EcoChill**, Comparison of synthetic and hydrocarbon system for kiwifruit cold store

**Industrial Refrigeration, AC and Heat Pumps**

**Chair: Stefan Jensen, Scantec**

**Peter O'Neill, Mayekawa Australia**, NH<sub>3</sub> heat recovery high temperature heat pumps in Australia and New Zealand

**Ian Wilson, Strathbrook Industrial Services**, The evolution of CO<sub>2</sub> refrigeration system

**Scott Clydesdale, Gordon Brothers Industries**, An overview of the largest NH<sub>3</sub>/CO<sub>2</sub> cascade refrigeration system in Australia

**Stefan Jensen, Scantec Refrigeration Technologies**, Low charge NH<sub>3</sub> refrigeration systems

**Massimo Casini, Dorin**, Transcritical CO<sub>2</sub> compressors for economised cycle

**Julian Hudson, Glaciem Cooling Technologies**, R744 claims the middle ground

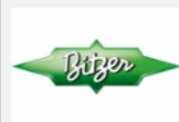
**Ian Tuena, The Natural refrigerants company**, Opportunities for hydrocarbon chillers in Australia

17:45 Q&A with Audience

18:00 Closing remarks

**DINNER NETWORKING RECEPTION**

19:00



Dinner Networking Reception - sponsored by BITZER

Dinner speech by Peter Gibson, Managing Director, BITZER Australia



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# Standup please!





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