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Cold Storage Annual Conference



COST-EFFECTIVE REFRIGERATION WORKSHOP

A five day teaching workshop to upgrade your refrigeration and heat pump knowledge

WHERE

The Centre for Postharvest and Refrigeration Research at Massey University, Palmerston North

WHEN

September 2nd to 6th 2024 (Monday to Friday)

This is the 30th offering of this workshop which continues to be demanded by the food and refrigeration industries. Over the five days we'll discuss the technical, commercial and environmental aspects of refrigeration and heat pumping. We hope that this course will be of interest to you or your staff and we welcome your attendance.

This is the workshop for you if you are part of the following industries:

- Businesses using industrial refrigeration equipment
- Refrigeration system designers and contractors
- · Suppliers of industrial and large commercial refrigeration equipment
- Energy suppliers, consultants and researchers

We'll cover both the design and operation of refrigeration systems and refrigerated applications, as well as heat pumping for process heating, and how environmental policy, legislation and regulations impact the refrigeration and food industries.

An optional fifth day is offered this year, where the focus will be using calculation methods provided via spreadsheets.









For more information visit: <u>https://events.massey.ac.nz/cost-effective-refrigeration/</u>

Presenters

Professor Don Cleland and Dr Richard Love will be presenting at the workshop.

They both have extensive experience in refrigeration, heat pumping, design, food processing and preservation, energy management and energy efficiency.





Lifecycle Refrigerant Management on the Road to Net Zero

GCCA releases annual list of world's largest temperature controlled warehousing and logistics members

As the demand for cooling and refrigeration grows, A-Gas is at the forefront of supplying and managing the refrigerants that we rely on in our daily lives; they are critical to the way we live.

As an industry, we must transition to lower Global Warming Potential (GWP) alternatives and ensure that potentially harmful legacy refrigerants are carefully managed to prevent their release into the atmosphere. The recovery and subsequent reclamation or safe destruction of used refrigerants is key to mitigate the environmental impact of products that remain critical to our everyday lives.

This is Lifecycle Refrigerant Management (LRM), and it is imperative in delivering a sustainable future for the cooling and HVAC-R industry. A-Gas' LRM activities include:

Recovery, reclamation and destruction of used refrigerants:

We recover and reclaim used gases to minimise the amount of virgin product being created and, at the same time, prevent their release to atmosphere. Where the future reuse of a refrigerant is no longer possible, A-Gas provides customers and partners with a United Nations-approved destruction technology. Recovery and reclamation are the circular economy in action at A-Gas.

Supplying lower GWP gases and reclaimed refrigerants:

As part of LRM, we supply lower global warming gases and reclaimed refrigerants to enable the transition away from Ozone Depleting Substances (ODS) and high GWP virgin refrigerants.

EMBRACING CIRCULAR ECONOMY PRINCIPLES

A-Gas is committed to embracing circular economy principles, which are the driving force behind our value chain. By safely recovering, reclaiming and repurposing refrigerants that are already in use, we reuse existing resources rather than disposing of products or creating new materials.

TOWARDS ZERO, TOGETHER

To support our journey towards Net Zero, A-Gas teams globally are focused on our Towards Zero, Together commitment. This encompasses our dedication to staying safe, reducing all possible emissions and preventing refrigerant leaking into the atmosphere.

ROADMAP TO NET ZERO

As part of Towards Zero, Together, we are committed to reducing our Greenhouse Gas (GHG) emissions. A-Gas has pledged to become Net Zero by 2035, with a 50 percent reduction by 2028.

A-Gas is a global enabler of Lifecycle Refrigerant Management. We are dedicated to the recovery and subsequent reclamation or destruction of used refrigerants. For over 30 years, A-Gas has supported its clients and partners on their environmental journey by supplying lower global warming gases and actively increasing the circularity of the industries it serves, building a more sustainable future.

Reference: A-Gas



FOR FURTHER INFORMATION

How A-Gas 'lifecycle refrigerant management capabilities can support your cold storage business' Net Zero journey, please contact:

Mitch Williamson, Country Manager, A-Gas (NZ) 021 0878 0838 | Mitch.Williamson@agas.com www.agas.com/nz



Cold Chain Technical Assistance in Bangladesh



In February 2024, GCCF sent to experts to Dhaka, Bangladesh to work with companies investing in advanced cold chain developments. With expertise in design build and operations, GCCF worked with six businesses to advise and train on best practices, these include business development for a 3PL; warehouse / storage operations; refrigeration systems; design and construction. GCCF also supported the Cold Chain Investment Conference held February 28th and followed up with additional training and technical assistance in March 2024.

Reference: Global Cold Chain Alliance (GCCA)

Global Foodbank Network

The GCCA and Members Join Global Foodbanking Network in NYC

On February 13 and 14, GCCA and members GridMarket, The Farmlink Project, and United States Cold Storage joined the Global Foodbanking Network's (GFN) networking and roundtable session in New York City. The event was hosted by GFN and connected various food rescue partners across the U.S. The programming allowed participants to network with one another and discuss key issue areas for GFN and food banks, including access to reliable data, improving resiliency of food systems, and new technologies driving food rescue organisations forward.

Challenges such as premium costs for donations that require repackaging, organising just-in-time deliveries, energy access, and crisis management are ever-present. GCCA will continue to work with our members around the world to develop practical recommendations for reducing food loss and waste and supporting food rescue.

As part of GCCA's Food Maximisation Initiative, GCCA / GCCF has formed a partnership with GFN to provide cold chain technical assistance and connect food banks globally with GCCA members who can provide the necessary infrastructure for redistributing safe food from landfills to food banks. 47 food rescue organisations have joined to date as complementary GCCA members under this Initiative.

More on GCCA's Food Maximisation Initiative <u>click here</u>: Reference: Global Cold Chain Alliance (GCCA)



Fortifi Launches Global Platform

The acquisition of MHM Automation by Fortifi marks a significant expansion in the company's solutions offering and global footprint

Fortifi Food Processing Solutions, today announces its launch as a unified platform of global leading brands and products within food processing equipment and automation solutions. Operating in more than 15 countries spanning five continents, Fortifi provides a broad range of solutions across the food industry including applications in protein, dairy, and fruits and vegetables. Fortifi's technologies enhance productivity, maximise yield, and improve worker safety for customers around the world.

"Fortifi's strategy is centered around a relentless focus on innovation, unparalleled customer service, and expansion through continuous improvement and complementary acquisitions of other leading brands and capabilities," said CEO Massimo Bizzi. "As a strategic partner to our customers, we strive to offer a full portfolio of solutions across the food processing value chain."

The closing of the acquisition of MHM Automation, a New Zealand based provider of post harvest processing, protein processing, and packaging solutions, further strengthens Fortifi's capabilities with innovative, reliable systems and equipment that improve safety, optimise product quality, and extend our automation and robotics capabilities. Fortifi has also signed definitive agreements to acquire LIMA France ("LIMA"), a France based supplier of meat bone separators, deboners and grinders-desinewers, and Reich Thermoprozesstechnik GmbH ("Reich"), the oldest Germany based manufacturer of thermoprocessing food systems, both of which are expected to join Fortifi in the first half of 2024 subject to customary regulatory approvals.

The formation of Fortifi began in 2021 when investment funds affiliated with KKR, a leading global investment firm, acquired Bettcher Industries, a leading provider of innovative protein processing tools. The following year, Bettcher acquired Frontmatec, a global supplier of automated pork and beef processing equipment, forming an end-to-end provider of protein processing solutions. MHM adds capabilities across new food processing segments and applications, including dairy and fruits and vegetables, and further expands Fortifi's global reach by establishing an even stronger local presence in the Asia Pacific region.

"I am thrilled to welcome MHM into the Fortifi portfolio, and I look forward to welcoming LIMA and Reich as well," said Dan Daniel, Chairman of the Board of Fortifi. "The global footprint, technologies, and expertise these brands bring will help Fortifi continue to serve its customers with excellence."

All employees of MHM, Reich and LIMA will join the existing Fortifi team as participants in a broad based ownership program that provides all Fortifi employees the opportunity to participate in the benefits of equity ownership. This strategy is based on the belief that employee engagement is a key driver in building stronger companies. Since 2011, KKR portfolio companies have awarded billions of dollars of total equity value to over 60,000 non-management employees across more than 40 companies.

ABOUT FORTIFI FOOD PROCESSING SOLUTIONS

Headquartered in The Woodlands, Texas and operating across more than 15 countries, Fortifi is a leading platform of automated food processing equipment and automation solutions. Fortifi serves customers worldwide through its global manufacturing and service footprint, and drives improvements in yield, productivity, food quality, and worker safety for many of the world's largest food producers. Fortifi's portfolio includes Frontmatec, a full-line supplier of automated red meat processing equipment; Bettcher Industries, a manufacturer of protein processing tools, machinery, and associated aftermarket parts; and MHM Automation, a New Zealand based provider of automated processing and material handling solutions.

For more, <u>click here</u>. Watch video, <u>click here</u>. Reference: MHM Automation



New import requirements for frozen berries a win-win for consumers and food importers

New Zealand Food Safety today issued new import rules for frozen berries to help keep New Zealanders safe and improve processes at the border.

In 2022/2023 there was an outbreak of hepatitis A virus associated with frozen berries, affecting 39 people.

"New Zealand was among a number of countries which recalled frozen berries at different times due to concerns about the presence of hepatitis A," says New Zealand Food Safety Deputy Director General Vincent Arbuckle.

"We've worked hard to the identify and implement ways to improve food safety rules to better manage the risk to consumers. As part of this we worked closely with major frozen berry importers, who have expressed strong support for the changes.

"New Zealand Food safety's work to strengthen these requirements was acknowledged in a recent Office of the Auditor General report into monitoring importers of high risk foods as 'robust and in line with international best practice."

In a first for New Zealand, the change introduce the use of independent certification to confirm an overseas manufacturer's food safety systems meet New Zealand's food safety standards.

"This gives us more confidence that risks associated with frozen berries are being managed off shore before they come to New Zealand," says Vincent Arbuckle.

The changes will come into effect on August 1 and importers have 18 months (until 31 January 2026) to transition to the new import requirements. We anticipate that importers will opt take up the system fairly quickly.

"Now that the outbreak is over, and affected products have been removed from the shelves, the risk to consumers has reduced. Hepatitis A virus in imported frozen berries, however, remains a potential risk.

"If consumers have concerns or are part of a vulnerable population group, then they can heat treat frozen berries to over 850C for at least 1 minute," says Mr Arbuckle.

More about the rule changes is on the New Zealand Food Safety website, <u>click here</u>:

CHANGES INTRODUCED INCLUDE:

- Strengthening the imported food category of frozen berries from Increased Regulatory Interest food to High Regulatory Interest food.
- Clearly describing the products included or excluded from the application of the clearance requirements.
- Removing ineffective requirements for microbiological testing of frozen berries at the border, with more robust requirements in place for manufacturers prior to shipping.
- Addition of specific provisions for the use of third-party certificates and their accompanying manufacturers' declarations for clearance of imported frozen berry consignments.
- Specifying what assurances official certificates must provide and the need for them to be agreed between an exporting country's competent authority and MPI.

Reference: Ministry for Primary Industries (MPI)



EECA Market Update and Quarterly Webinars

The Market Update series aims to enhance understanding and utilisation of our expertise, products, and support. Included are webinars that target industrial businesses and professionals interested in energy, carbon, and sustainability, offering insights to facilitate action. Each quarter, attendees receive updates on EECA's products and programmes, co-funding, tools, research, and insights to aid energy efficiency and low-emissions projects. Government and industry can work together to accelerate our move away from fossil fuels. And great climate gains can be achieved through new and innovative technology that also benefits your business in other ways – improving efficiencies and reducing costs over time.

Reference: Energy Efficiency & Conservation Authority (EECA) For more, <u>click here</u>

Co-funded Transport Projects Announced

The latest recipients of Low Emissions Transport co-funding have been confirmed. These include shore power for Port Taranaki, allowing ships to berth without running off diesel generators, an electric water taxi for Waiheke Island, electric mobile harbour cranes at Port of Napier, and an electric loader with Isaac Construction, who are aiming to be the lowest carbon asphalt plant in New Zealand.

We're looking forward to seeing these projects come to life alongside or partners.

For more, <u>click here</u>





Spotlight on Energy Projects

Fonterra is turning heat waste into energy with the installation of a high temperature heat pump at the Palmerston North plant.

The 500kW heat pump turns wasted heat from chillers and compressors into a reusable heat source meaning they can reduce the use of natural gas in their production.

Industrial heat pumps for process heat, click here

Leach & Co's new fully electric front loader has been helping to keep things clean at Wellington's southern landfill for the past two months.

The team is finding it to be just as powerful as their old diesel loader, and much quieter. The loader is a first of its kind in New Zealand and will reduce the operational emissions of the landfill by up to 15%.



Charging Your EV on the Road

Over on our Gen Less platform, we've updated our EV charging information to help New Zealand's 10,000+ EV drivers keep their power up while on the road. Head over to Gen Less to learn about the different types of public chargers available – and what to use when – as well as our top tips for long road trips, and charging your car at holiday accommodation.

Reference: Energy Efficiency & Conservation Authority (EECA) Charging your EV on the road, <u>click here</u>

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Clean Energy Meat Processing

New Zealand's meat processing sector relies on steam and hot water for the cleaning and sterilisation of equipment, rendering of animal by-products, and for making specialty foods such as small goods and cured products.

To produce thermal heating, the sector largely uses natural gas in the North Island, and coal in the South Island. Our new Meat Processing Decarbonisation Pathway helps businesses improve energy efficiency and reduce energy related carbon emissions from meat processing, which ultimately means reducing the reliance on fossil fuels across meat and small goods manufacturing processes.

For more, <u>click here</u>

Reference: Energy Efficiency & Conservation Authority (EECA)





The Costs of Economic Mismanagement

The view I have had on interest rates for some time now is that just as the Reserve Bank over stimulated the economy during the pandemic they have now over restricted it. They have unfortunately become a source of instability in the New Zealand economy – first creating the tightest labour market conditions on record and pushing inflation above 7%, and now crushing the economy to the extent retail spending volumes per capita are running 11% down from two years ago. Incompetent seems too generous a word for what they have done. Accountability? None.

Our economy is in recession, and it did not have to be this way. However, the Reserve Bank are not alone in displaying poor economic management in recent years. The previous Finance Minister oversaw a blowout in the government's net debt to GDP ratio from under 6% to near 20% with no clear improvement in economic or social outcomes. Just more bureaucrats in the way of the private sector.

Just as the Reserve Bank has now flip flopped the over way with its poor monetary policy implementation so too is the new government having to flip fiscal policy back the other way and in the process cause pain for many people, only some of whom rode the previous gravy train.

We have then a situation of tight monetary policy now being joined by tight fiscal policy. The Labour government did what people like myself predicted they would when elected in 2017. They have again left a fiscal mess for National to deal with. They will do it again when next in power after National arrogance once again becomes dominant.

As fiscal policy exerts restraint on the economy (the mid year tax cuts will likely not noticeably lift household spending), the Reserve Bank will see scope for faster easing of monetary policy than the prolonged profile they are currently running with of no easing until mid 2025.

It pays to note that the Reserve Bank have yet to incorporate a shift in fiscal stance into their forecasts for the economy. When they do take into account the new government's fiscal settings scope for easier policy settings will arise at the same time as they belatedly recognise that their tightening went too far. Finding evidence that things have been excessively crunched by an organisation that seems to have lost its way under current leadership is not hard.

A week ago we learnt that our economy slipped back into recession in the second half of last year. This is the second recession in recent times because we were also technically in recession over the end of 2022 – start of 2023.

Per capita GDP has shrunk now for five quarters in a row and during Labour's term growth in this measure was just 3.3%. In the previous six years to late 2017 growth was 10.1%. The recent decline is stark.

With falling GDP per capita it is little wonder a record net 47,000 Kiwis left the country in the past year. Amongst other things they are seeking higher incomes offshore (teachers, nurses, police, shelf packers etc.). How to explain the record net migration then? The leavers are being more than replaced by people also moving to lift their incomes above what they can earn in low to middle income countries like India and China. I guess we will meet in the middle one day with higher incomes there and lower incomes here.

For a while during and after the reforms of the late 1980s into early 1990s it looked like New Zealand was getting set to move back up the OECD ladder of income per capita. Not now. The country has lost its way and just as Opposition parties talking about a wealth tax provide an incentive to shift one's funds out of New Zealand, so too do the economic and social underlying trends suggests it may be a good idea to shift oneself as well – unless you love the land here as I do.

Here are some other indicators of poor performance by our economy.

The value of business imports of capital equipment was running 13% down from a year earlier in the three months to February.

Consumer confidence measured in the ANZ Roy Morgan monthly survey is sitting near a reading of 95 where 112 is the average for the past decade. My own Spending Plans indicator sits at -24% versus a -2% average with some new deterioration setting in recently.



The Costs of Economic Mismanagement Continued

It is hard to imagine these types of readings improving with the recent publicity given to our economy going back into recession and job cuts happening in the bloated public sector.

To make matters worse the value of our export receipts in the three months to February was down about 2% from a year ago though I don't think we can blame either the Reserve Bank or previous government for that. World growth is tracking below average. However, with the ratio of our exports to GDP now back to levels of the late 1970s it's hard to feel positive about our export sector. NZTE don't seem to have done much good.

Just to illustrate how truly bad things are consider this. As a rule, in the past when monetary policy has been tightened to exert downward pressure on the economy and inflation our currency has risen strongly. Restraint has come via extra pain being placed on the export and import competing sectors.

But over the past year the Trade Weighted Index average measure of the NZ dollar has sat near 71 from 71.5 a year back, 74.1 two years back, and 71.9 in the year ending February 2021. The current level is near 71. This cycle monetary policy has not operated via the exchange rate transmission mechanism and instead the Reserve Bank has had to rely on virtually all the restraint coming from the household sector and businesses generally affected by high financing costs.

This is a wee problem. You see, when the Reserve Bank realise they have over crushed things and cut the official cash rate quickly it will take a long time for the effect to be felt in household budgets. That is because we are heavy users of fixed interest rates in New Zealand.

In the past a quick series of interest rate cuts would see the Kiwi dollar falling away so the export sector would receive a good boost and the lift in NZ's economic growth would come out of the regions. But with the NZ dollar not having risen in response to higher interest rates it seems reasonable to expect that it will not fall much once policy easing gets underway. Hence, no regional growth burst just around the corner and better household spending is a story for the second half of 2025.

Yes, it's a mess largely thanks to those who in the past few years have had control over implementation of monetary and fiscal policy. Honestly, could your lazy mate from down the pub have done any worse?

So, where now? First, don't pay any attention to the specific numbers which we economists will generate with regard to how fast our economy grows, where the unemployment rate goes, the exact timing of monetary policy easing, where rates bottom out and when. It is impossible to credibly predict any of these things because the way our economy operates is different from past years and those previous years are all we have experience of and have based our models on. Those models run by the Reserve Bank and Treasury have been wrong and will continue to be wrong.

The best you can do is accept a general view on where we are headed, and where specific pressure points and areas of opportunity may lie. Your planning focus needs to be on making sure you are as up to date as technologically possible with information on your market, what your customers are doing and wanting. Then make sure you assess the data you receive, consider the implications of shifts in the data, and decide what to do in response to new trends developing. Then do something.

For most businesses the need for change will be minor. But at a minimum you need to be able to get as good a feel as possible for whether risks to your operating assumptions are growing or lessening and whether the time seems "safe" or not to undertake certain things.

This is where economic cycles come from. At some point we will generally feel that things are safe and it is time to rebuild inventories, open new premises, place orders for new equipment and systems, and secure new and better staff.

Of course the best time for doing many of these things is when your competitors are running in the other direction. But to do that you need really secure cash flows and capital built up during the previous upturn.



The Costs of Economic Mismanagement Continued

Consider for instance that just as I noted 12 to 18 months ago, partially completed multi unit developments are being bought at a discount by those with cash able to finish construction and wait for the housing market to improve before selling them. This is when the longer-term operators with experience of cycles and the over exuberance on the way up can make their best investments.

One thing to finish on. "And the darkest hour is just before dawn." Me writing dismal stuff like this, media with tales of woe, people talking about getting the hell out of this depressing place – this is what long awaited success looks like to the Reserve Bank. This is when tight monetary policy gets its greatest grip on the economy and really slashes the inflation outlook.

Having hit this point the incentive for the Reserve Bank is not to let up just yet. Their task now is to calculate when to ease and at what speed knowing that the longer they leave it the faster the speed of interest rate decline will need to be. What I mean here is the Reserve Bank is incentivised to follow a plan of risking easing late and easing a lot in a short time period rather than easing in a smooth pattern and risking inflation settling too far above 2%.

There are better cyclical economic times coming and as someone put it to me recently, the goal is "survive to '25". But what about structurally better times with higher average income growth per capita? I don't see it. Thank goodness Aussies speak a version of a language we all understand and there are already over 700,000 of us across the ditch to bludge off of in our first few weeks or months over there.

Reference: Tony Alexander Economist

More from Tony Alexander, Economics Speaker and Writer, <u>click here</u>.



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NZ Cold Storage Annual Conference

Theme: Cold Logistics Excellence: Optimising Efficiency, Performance and Sustainability



At the Millennium Hotel, Queenstown

Programme Overview

Sunday 11 August 2024

1pm – 5pm: Optional Activities* 5.30pm – 8pm: Welcome Function & Networking

Monday 12 August 2024 - Conference Day 1

From 8am:	Registrations open and arrival tea and coffee
4pm – 5pm:	AGM
6.30pm – 7pm:	Pre-Conference Dinner
From 7pm:	Conference Dinner
9am – 4pm:	Conference Sessions

Tuesday 13 August 2024 – Conference Day 2

From 8.30am:Registrations open and arrival tea and coffee9am - 3pm:Conference Sessions3pm - 3.15pm:Trade show prize draws3.15pm:Conference Close

*Optional Pre Conference Activities: Beer Tasting / Golf / Wine Tour

REGISTER ONLINE HERE