aqa



Demand driven

ggregate News was written before Election Day with all the usual noise of campaigns ramping up. So it's encouraging to see that no matter which way it goes, quarry materials are going to be in demand. (see story page 2). We as a sector are not impervious to political and economic cycles, but governments of all persuasions always need to roll out roads and other infrastructure – and all have failed to do enough of that for a generation or more.

The necessary catchup will apply whatever parties are in office. The key thing for us, as our CEO Wayne Scott observes, is getting the policy settings right. Wayne watches Wellington much more closely than most of us and his pick is a fair amount of policy 'business as usual' despite some of the rhetoric.

Truth is, we do need reforms to resource management law that has been

in place – and getting progressively more cumbersome – since I was barely out of shorts. As a sector, we just want to be able to source material and deliver it for Kiwis in a way that is sensible and sustainable to our communities, , environment and businesses.

One thing is clear. Quarry by quarry, we do need to keep up our messaging, especially amid rising environmental expectations. At a recent AQA Board meeting we discussed recycling, which many of us are working to increase.

As the story on page 5 reflects, there needs to be context. Quarries endeavour to do their best but you need a range of factors to make recycling work, including a good volume of source material.

Recycling is not the only opportunity for us to lift our environmental contribution. It's good to hear consideration is being given to including





things like wetlands rather than just planting trees as ways to soak up carbon dioxide.

Quarries develop a lot of wetlands to help with a range of outcomes, and we should not be overlooked as officials devise ways to widen the way we work towards our carbon reduction goals.

On the technical front, we are grinding our way towards a conclusion of the elongated process to get new M04 specs. There are remaining concerns about the cost of testing and accepted durability of testing results but our Technical Committee and Adviser Mike Chilton are working through these. They've done some great work on behalf of us all and taken us to the home straight.

Speaking of great work, a shout out to retiring AQA Board member and former Chair Brian Roche.

I worked closely with Brian as his deputy during his three years as Chair and learned a lot. Brian was a top wrestler in his day and it set him up well for how he engaged on the issues, no matter how big. He's entirely justified in taking some pride (see story page 3) in the progress we've made in our sector over the decade plus he served on the AQA Board.

We all need to take some pride in what we do – and communicate it as well.

Jayden Ellis Chair, AQA

What we need post-election

he election will be over this month and AQA CEO Wayne Scott predicts no massive change for quarries regardless of who forms the next government.

He sees the economy being in for a shaky ride over the next couple of years, but the outlook being good for the quarry sector.

"We can only hope a new Government is formed quickly and we can get back to assisting officials with good policy on behalf of the industry."

He says whoever is in power, there will likely be greater expectations to show what the sector is doing to ensure operations are sustainable.

"This is not only reducing Co2 emissions, but addressing and community and iwi concerns about quarrying, ensuring we enhance the environment by offsetting the impacts of our operations and ensuring our workplaces are free of injury and illness."

Wayne adds recycling and reuse of products will play an increasing role as all sectors try to reduce waste and the amount of re-usable material currently sent to landfill.

He recently attended the Civil Contractors conference where Infometrics Chief Economist Brad Olsen showed this graphic on infrastructure spending over the next seven years. to urgently address resource consenting issues so quarries can respond to demand.

"If we have a National-led government, I don't think there will be huge changes to Labour's RMA reforms. While we have real concerns over aspects such as the NPS on Indigenous Biodiversity, the principles contained within legislation passed before Parliament rose are sound; we just need clarity on workability issues such as consistent definitions, how to deal with conflicts and consenting pathways for quarries."

Regardless of who is in power, he predicts national direction in the form of a National Planning Framework or National Policy Statements/National Environmental Standards will continue.

"The focus will be on ensuring reduction in carbon emissions and no net loss of biodiversity, highly productive land or wetlands. It is important we support those outcomes but ensure there is a consenting pathway where our activities do impact on the environment."

Wayne says a "gateway test" was first introduced after the AQA helped win changes to the NPS Freshwater Management and regulations pertaining to wetlands. It provided a consenting pathway for locationally constrained quarries deemed regionally significant.



"Regardless of who is in power, infrastructure spending will increase. It will be nowhere near the wild promises being made by both Labour and National, but annual spending on electricity networks and water infrastructure is set to double over the next five years; while expenditure on roading will at least match current levels," says Wayne.

"While this will put pressure on contractors and suppliers, it will give some certainty in demand for aggregate and sand."

Wayne says the AQA will be imploring the next government

"The test is structured to allow quarrying which is important for the region in order to deliver infrastructure and housing." Unfortunately, the wording in each gateway test has been different causing some confusion among commissioners and local government.

The AQA is working on a consistent gateway test to provide clarity while achieving what the Government intended. This will be discussed with officials through September/October and no doubt with whomever is the next Minister for the Environment. AQA

We've grown up

Brian Roche can look back at 10 plus years on the AQA Board and believes the industry has grown up a lot in that time.

With a new role for Ravensdown that takes him out of quarrying, Brian says it was appropriate for him to stand down. He'd come onto the Board in 2012/13 after being seconded to join the implementation team established by MBIE to pick up on the recommendations of the Pike River Royal Commission.

"Their initial thoughts were that there'd only be about 100 quarries in New Zealand and only 20-40 of them might be big enough to call mines," he says.

"It was a bit of an eye-opener."

Brian and former AQA CEO Roger Parton were the only enduring quarry industry representatives seeking to educate officials on the actual scale of the quarry sector and the need to have quarryspecific regulations (which finally emerged last year).

He adds, there were also a lot of naive people at that time in the quarry sector.

"There were people who said: 'We just dig holes and fill them'. I'm really proud the sector has matured."

Brian says there are still a few rogues in quarrying, but most now understand the critical importance of obtaining and maintaining social licence to operate.

"Everyone is the better for it. We've grown up. We are able to say: 'We are part of this community. It's crucial for everyone that we are able to keep producing and this is what we do to mitigate our footprint'."

As for future challenges for the sector, Brian thinks the biggest is 'decarbonisation' given the current reliance on diesel.

"It's going to be really hard for quarries, but people will expect to see progress."

Brian says the sector has always come through challenges – including that currently faced by Ravensdown and other lime and fertiliser producers amid cost/price pressures on farmers.



Brian Roche stepping down as AQA Chair at the 2018 QuarryNZ conference alongside retiring CEO Roger Parton.

"It's hard for any body connected to the rural sector at the moment."

His new role is as Ravensdown's Health and Safety Business Partner, working alongside groups and employees on investigations, incidents and projects to reduce risks.

He didn't come into the sector with a health and safety background. Having qualified as an engineer at Waikato University, Brian got his start in quarrying at Winstone Aggregates' Whitehall site working as a production engineer.

He joined Ravensdown 13 years ago, managing the Supreme lime quarry at Te Kuiti, before becoming the company's Quarry Development Manager.

He became AQA Chair at the 2015 conference in Hamilton, serving in that role till 2018.

"I thought I'd be leaving the Board and next thing I'm dropped in the deep end as Chair of it."

Brian replaced Andrea Cave who he said left big shoes to fill, particularly as he came in with little experience in chairing. He says experienced Board members like Tony Hunter and Bruce Taylor were great mentors.

His deputy was Jayden Ellis who has since become AQA Chair. "He's forgotten more things than most people know about technology in quarries."

Brian says the AQA has been well-served by its Board and staff, and that helps him have real confidence that it and the industry will continue to mature and grow. AQA





Quarry wetlands part of the climate solution

A Government report saying more wetlands should be encouraged to absorb carbon dioxide, should also consider quarries as well as farmland, says the AQA CEO Wayne Scott.

The latest discussion is another example where quarries need to promote the environmental and economic benefits they bring to New Zealand, he adds.

A recently released Cabinet paper says we rely too much on planting exotic forests to remove carbon dioxide from the atmosphere, bringing risks and costs. It recommends developing a more diverse portfolio with vegetation (mostly grown by farmers) being identified as a way to soak up carbon dioxide. The paper also says there are opportunities for quick gains in expanding, replanting, and rewetting wetlands.

Wayne Scott says many quarries create or expand wetlands as part of their activities, helping offset the 90 percent loss of our wetlands, mostly to farming.

"For example, within a few kilometres of each other in Waikato, we have two quarries which have both won awards for the wetlands they have created (Winstone Aggregates Baldwins Quarry at Meremere, and Stevenson's Waingaro Quarry at Ngaruawahia).

Climate Change Minister James Shaw responded to the Treasury report saying currently only one technology – planting trees – is being used to draw carbon dioxide out of the atmosphere. He says wetlands, mangroves and peatlands soil can also sequestrate C02.

Last year the AQA helped get changes to the Government's National Policy Statement on Freshwater Management. That initially would have halted quarry expansions on land that used a very narrow definition of a wetland.

Wayne says if the Climate Minster wants to encourage further wetland development, he should encourage Forest and Bird to withdraw its appeal against the revised definition.

Many farmers are now recreating wetlands, in part to help process or reduce nutrient run-off. This can reduce the amount of carbon offset.

Wayne says quarries don't have the same need to reduce nutrients, so they can provide wetlands that not only manage water run-off but are even more efficient at storing C02.

"Our sector is not looking for incentives. We just need politicians and activists to recognise what we contribute to our communities and the planet through creating and enhancing wetlands – and allow us to keep doing that."

Wayne says Cabinet's consideration of encouraging alternative carbon sinks such as wetlands shows how the quarry sector must keep promoting both its environmental and economic messages. A senior *Stuff* journalist recently contacted him having read February's AQA submission on the Natural and Built Environment bill, part of the RMA reforms.

"Even though we've been saying this for years, the journalist was astonished to learn Kiwis consume an average of nine tonnes of aggregate a year. He wrote quite a positive story reflecting that. We need to keep telling people how critical we are to the economic health of this country – and how much we are contributing to its environment as well." AQA



The juggle required for quarry recycling

Kiwis want to recycle and so do quarries, but there are constraints that need to be recognised, says Wayne Scott.

he most common question Wayne gets asked by politicians is: How much recycling is done by our quarries?

Wayne can point to some very good examples including Atlas Concrete's recycling facilities in north Auckland and Fulton Hogan's Recycled Asphalt Plant in Auckland, which is fully electric, including a Keestrack R3e, believed to be the first of its kind in Australasia. The crusher mills recycled asphalt in mixes of up to 40 percent to go with new material.

Wellington's Kiwi Point quarry is now ramping up to 100,000 tonnes p.a. after an initial 50,000 tonnes of concrete and asphalt were recycled in 2021/22 – almost matching roadbase production from virgin products at the quarry.

In June this year, Winstone Aggregates acquired the Urban Quarry sites in Onehunga and Henderson to collect construction and demolition waste, divert it from landfills and upcycle it back into the industry along with aggregate. It said this 'gamechanger' provides a viable circular waste solution to recycle concrete at scale.

Wayne Scott says, currently, two percent of the aggregates market here is supplied from recycled material.

"We encourage and support our members to do all they can to increase this, but people outside the sector need to be aware of some the constraints on achieving high levels of recycling."

First, quarry materials are low value products. A tonne of aggregate may cost not much more than \$20 if sourced at the quarry.

"When you start recycling material, you add cost. While waste might be sourced for next to nothing, it has to be extracted, trucked, sorted, stacked, crushed and then blended with virgin material." Wayne adds other factors are the volume of recyclable materials and competition for them. For example, Dunedin used to see it's 100 tonnes of bottles a month crushed and blended along with 45,000 tonnes of virgin aggregates.

The quarry operator met the considerable cost as a responsible member of the community. Now, the city's glass goes into making new bottles.

"That's a better option from all perspectives – environmental and economic."

Another factor is highly urbanised countries often have more recycling of aggregates, he says. The UK, for example, is reputedly recycling nearly 30 percent of its aggregate needs. Wayne notes the UK has similar land area to us, but nearly 14 times the population.

"So, there is less land for quarrying and more readily available recyclable material close to major population centres."

Ireland with a similar population to us has only about half our current rate of recycling.

Wayne says recycling requires a range of supporting factors to be successful. These include sufficient raw materials from nearby and substantial urban demolition, ability to meet necessary technical requirements, and being both environmentally sound and costeffective, including transport and reprocessing costs.

It can be challenging to meet all of those requirements, but our quarry sector will press on with its efforts to expand recycling, he adds.

"I'd just ask people to be aware that we don't have some of the economies of scale and other factors that help other countries achieve more recycling of aggregates." AQA

AQA Technical update

M04 Basecourse Specification

The presentation from NZTA on M04 changes at QuarryNZ was well-received with only a few questions posed on the day.

Comments have been received from four companies to incorporate into AQA's response on the final draft before the M04 committee meets again to discuss the specs. The most consistent negative feedback is the increased cost of testing, which is calculated to cost between \$2.00-2.50/m³ for Class 1 M04. Also, there's concern on the limited "use by" time of test results. A trial of the new M04 spec is proposed for Hawke's Bay and East Coast recovery.

Waste Levy Changes

The AQA has published guidance on the cleanfill changes and this has been sent out to all members. If you haven't received this, please contact us for a copy – office@aqa.org.nz. Guidelines have come out for comment from WasteMINZ, representing the sector, on coal tar-contaminated material (asphalt and chipseal). This will now only be able to go in a Class 3 managed fill site, not Class 4 where it was previously considered "inert".

Annual Production Returns to NZP&M

NZ Petroleum and Minerals has only received a couple hundred responses to the 2022 production survey. That's barely half the response from last year and is very disappointing. The AQA represents 85 percent of production and its incumbent on all members to report their production. Correct data helps the AQA and industry in its engagement with government, councils and communities.

Please file your production stats urgently. AQA Technical Adviser Mike Chilton is happy to help tech@aqa.org.nz.



NPTG Comms Subcommittee

The National Pavements Technical Group is exploring collaboration with the Road Engineering Association in terms of communicating its work through the REAAA. NPTG considers one of its main mandates is to share industry knowledge and the REAAA provides a good vehicle to do this.

Tauranga City Council IDC

AQA provided comments on the proposed Infrastructure Development Code changes to members of Tauranga's Urban Task Force sub-committee.

Quarry Products Technical Training

The AQA is in line to receive IQA's Australian core training programme so it can be modified for NZ in the spirit of collaboration. Videos haven't yet been arranged but CETANZ (Civil Engineering Testing Assn) is still in contact and wanting to assist. AQA

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