



EDITORIAL

Welcome to our fifth GAIN™ Newsletter!

JIM O'BRIEN, GAIN Convener,
UEPG Honorary-President



International and National Awards won by FYS Marketing in Malaysia, a very successful public relations story – turning a threat of a quarry closure into an exemplar of eco-tourism.

2019 - a year of further progress for GAIN Members

Preparing the GAIN Newsletter is a pleasant task, as there is so much positive news from members around the world. It again confirms how much we really can learn in sharing our industry best practices.

To start with China, it reports a significant national shortage of aggregates essential to ensuring its continued economic growth. Accordingly, the CAA is helping to develop a responsible supply of aggregates from the less-developed Guizhou Province, thereby developing that region economically and helping eliminate local poverty.

India is embarking on very ambitious infrastructural growth in the next 5 years, one of the main constraints being a shortage of aggregates. Therefore it is a national priority to encourage the development of professional new quarries, with parallel initiatives to eliminate the illegal extraction of natural sand and to replace it with manufactured sand. It is hoped that a national aggregates association will soon come about through the MEAI and AMA.

Looking to high-growth South-East Asia, it is impressive how in Malaysia the MQA is helping raise the social responsibility of the industry. It is very good news is that contacts have now been established with aggregates producers in Thailand and Indonesia, both included for the first time in this newsletter; both see great advantages in forming national associations and in belonging to GAIN.

Moving to North America, the NSSGA reports its lobbying success in achieving the withdrawal of the Waters of the United States (WOTUS) regulation, which had placed an unacceptable burden on quarry water discharges. From Canada, OSSGA describes a notable school education program, while ASGA is working with its permitting authorities on legislative reform. An exciting development is the formation of APAC (Aggregate Producers Association of Canada) to represent all of Canada in GAIN. In Mexico, ASEC is actively assisting its members on implementing new regulations and it continues to develop a national association.

In South America, ASOGRAVAS in Colombia is working with the Government on an ambitious infrastructural development program, also supporting greater responsibility in the industry. In Brazil, ANEPAC sees a welcome slow return to growth in the economy, though uncertainty has slowed infrastructural development. In Argentina, despite the country's ongoing economic woes, the Federación de al Piedra is actively planning the next GAIN meeting to be held in the city of Córdoba on 8-11 November 2020.

In the Middle East, Stevin Rock has several new marketing initiatives, not just within the UAE, but also in niche markets in Asia. In South Africa, ASPASA is actively facing challenges in an uncertain economy, with gritted determination to help improve industry environmental, social and health & safety performance.

In Australia, CCAA is highlighting the sustainability of its iconic concrete buildings, while in parallel campaigning against the lowest respirable crystalline silica exposure limits. In New Zealand, I was hugely honored to attend the 50th anniversary celebration of AQA, learning also of its campaign for better access to resources.

I hope you will find this Newsletter will be helpful in working towards our common goal of an even more sustainable industry globally. It provides gems of wisdom for all to learn.

Finally, I would like to wish all a very successful finish to 2019, every success in 2020, and am greatly looking forward to the GAIN Meeting in Córdoba, Argentina, on 8-11 November, 2020.



ASIA

News from China



HU YOUYI President of the China Aggregates Association (CAA)



Aggregates Industry plays a role in poverty elimination in Guizhou, China

Aggregates play an important role in national economic development and also the wellbeing of people's livelihood. At present, the aggregates price is generally high in China, especially in well-developed areas, as aggregates are particularly in short supply. In order to meet the supply demand of aggregates and greatly improve the high-quality and green development of manufactured aggregates in Guizhou province, southeast China, the Guizhou Provincial Department of Industrialization and Information Technology held a forum on development of manufactured aggregates industry in Guizhou (see map below).



Attending the forum were Xing Tao, deputy director of the Raw Materials Industrial Division of the Ministry of Industry and Information Technology of the PRC, Shi Lin, leader of the Building Materials Department, Zhang Gaiping, leader of the Freight Transport Department of the Ministry of Transport, Zeng Lingyun, leader of the Mining Rights Department of the Ministry of Natural Resources, Hu Youyi, President of the China Aggregates Association and relevant Guizhou government leaders.



The demand for aggregates in the surrounding provinces of Guizhou is huge. As a province with large aggregates production and a relatively lower price, Guizhou has become an important source of aggregates for the surrounding provinces and the Pearl River Delta and the Yangtze River Delta. The Guizhou government has vigorously promoted "the external transportation of aggregates from Guizhou to the outside of the province" strategy and built a 100 billion RMB industry, which is of great significance not only for the economic development of Guizhou, but also for poverty alleviation. It is also of great significance to the infrastructure construction of the southern provinces of China.

According to China Aggregates Association, by the end of 2018, there are more than 1,830 aggregate production enterprises in Guizhou, with an annual production of more than 1.5 billion tons, and an actual annual output of more than 1 billion tons with 66.7% capacity utilization and 30 billion RMB output value. The average price of aggregate in Guizhou is much lower than that of the surrounding provinces. By taking the advantage of the lower price of aggregates, Guizhou is vigorously developing manufactured aggregates industry.

Director Xing Tao pointed out that in recent years, the Ministry of Industry and Information Technology has accelerated the development of manufactured aggregates, carried out research on related topics, held seminars, extensively solicited opinions, and organized and formulated Several Opinions on Promoting the High Quality Development of Manufactured Aggregates Industry. The purpose of the forum is to comprehensively promote the high-quality and green development of manufactured aggregates industry in Guizhou Province which will drive Guizhou economic development. He also stressed the importance of formulating guidelines and a good communication between different government departments to accelerate the aggregates industry transformation and upgrading.

According to statistics, by the end of 2018, the output value of aggregates in Guizhou Province has exceeded 30 billion RMB, creating more than 100,000 employees and driving more than 300,000 jobs in related industries. Guizhou has rich limestone resources, and the implementation of the aggregates strategy can transform the resource advantages of Guizhou into economic advantages.

President Hu emphasized in the forum that green and high-quality development has become an important direction for development of China's aggregates industry. It is a must to establish an industrial system and strengthen research & development as well as supervision. The China Aggregates Association should play the role to guide the industry towards green and high-quality development.

After the forum, leaders of CAA accompanied government leaders and officials of three Ministry to inspect Bijie Panshi Construction Company, Bijie Jingyang Construction Company, Bijie Saide Cement and Limestone Mine, Wujiang River Yongan Wharf, and Guiyang Xiuwen Longfa Construction Company, which is a historical moment that the central government and CAA worked together to inspect the aggregates companies.

Due to natural and historical reasons, Guizhou is still a less developed area which has a long way to go. Making full use of the advantages of natural resources and developing high-quality aggregates are of strategic significance for Guizhou to develop its economy and eliminate poverty.



News from India



Dr RAMESH BHATAWDEKAR
Life Member MEAI,
International Fellow of the
University of Technology, Malaysia,
International Council Member of AMA



SANJAY NIKAM
Director of the Aggregates
Manufacturers' Association
(AMA) of India

India reports an significant shortage of Aggregates

India, the second largest global consumer of aggregates, estimated at 5.5bnt, is said to be the new landmark for the world construction industry market. Today the Indian construction industry faces a significant shortage of aggregates and sand. In fact, the availability and cost of sand have seriously slowed the progress of couple of projects in the country. In different States of India, the price of sand varies from USD3.3 to 33 per tonne. Considering the progress made by other countries in this area, we need to move fast, otherwise speed of high value projects will suffer.

The Government has already approved the development of 18 airports, namely Mopa in Goa, Navi in Mumbai, Shirdi and Sindhudurg in Maharashtra, Bijapur, Gulbarga, Hasan and Shimoga in Karnataka, Kannur in Kerala, Pakyong in Sikkim, Karaikal in Puducherry, Dholera in Gujarat and Bhogapuram in Andhra Pradesh. India will be spending around USD63 billion for 100 airports in II tier cities in the next 15 years. The overall volume growth of aggregate market is being projected at a breathtaking 11 per cent a year.

India to invest USD 1.4 Trillion in National Infrastructure during the next 5 years

The Government of India has set up a Task force to identify National Social and Economic Infrastructure Projects during next 5 years , that is up to 2024-25, with a budget of USD1.4 trillion (tn). By comparison, during the last decade, USD 1.1tn was spent on infrastructure projects. The ongoing ten mega infrastructure projects in India are:

1. Sagarmala Programme

Total investment USD 1 billion(bn) during 2015-2035 with total 610 projects. The objective of this programmer is port modernisation

and new port development, port connectivity, these ports being linked with industrialization and coastal community development.



2. Bharatmala Project

A new umbrella programme building 34,800km roads with an investment of USD750m.

3. Mumbai Trans Harbour Link Project

Mumbai Metropolitan Region Development Authority has undertaken this important project linking with 21.8km tunnel connecting the island part of the city and the mainland.



4. Arunchal Pradesh on Rail Map

This portion is NE region of India where total investment of USD 400m will be made for developing railway station at Arunchal Pradesh and connecting Arunchal Pradesh with Meghalaya.

5. Setu Bharatam Project

The aim of this project is to have railways without any railroad crossing. 208 Railway Over-Bridges (ROB) and Railway Under-Bridges (RUB) will be built at a cost of USD 300m.

6. Rashtriya Rajmarg Zila Sanjoyokta Pariyojna

Under this project 6,600km of highways will be built connecting all district head quarters in India.

7. Inland Waterways

Inland Waterways Authority of India (IWAI) has planned to operate inland cargo service on Ganga and Brahmaputra waterways. Further inland waterways projects are identified.



8. Gujrat Gorakhpur Pipeline

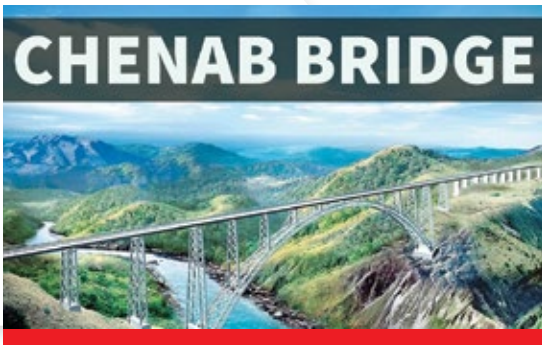
Indian Oil Corporation will build 1,987km pipeline from Kandla Port in Gujrat to Gorakhpur in Uttar Pradesh to carry 3.75 million tonnes of LPG per annum.

9. Chardham Highway Project

Chardham express highway will connect 4 holy pilgrimage places -Badrinath, Kedarnath, Gangotri and Yamunotri in Uttarkhand State at a cost of USD 1.7bn.

10. The Chenab Bridge

The Chenab Bridge is a railway steel and concrete arch bridge due complete in 2020 between Bakkal and Kauri in the Reasi district Jammu and Kashmir; it will be the world's highest railway bridge at 359m above the riverbed, the central arch being 480m long.



Progress on Promoting Manufactured Sands

The market demand for manufactured sand is expected to grow by 70 per cent by 2020, predominantly driven by the substitution of river bed sand by manufactured sand. The State of Telangana (formerly Andhra Pradesh) is utilising manufactured sand (M-sand) for more than a decade. The State Government itself is actively encouraging use of M-Sand as an alternative to river sand. The Mining Engineers' Association of India (MEAI) has recognised the wider need to launch a strong national campaign, in conjunction with the Government and State authorities, to switch the ecologically-undesirable extraction of sand from beaches and river-beds to manufactured sand produced in responsibly-operated quarries and pits.

Progress towards forming a National Aggregates Association

The Indian aggregate Industry is currently very fragmented with 12,000 family businesses with small quarries and low capacity plants. There are a few local associations in scattered clusters for addressing local issues but there had hitherto lacked a national level aggregate association for raising the standards of the Indian aggregate industry. There is a need to have an association of aggregate producers at national and State levels.

Sanjay Nikam, an enthusiast and a professional, has taken the initial steps in forming the Aggregates Manufacturers' Association of India (AMA). Several producers have already committed to joining and member registration is starting. Recently, MEAI has also applied to be a member of international body Global Aggregates Information Network (GAIN). Both initiatives are very important steps, and it is proposed to accept both AMA and MEAI as GAIN members pending the evolution of a national association which represents all aggregates interests.

GAIN World Map



News from Thailand

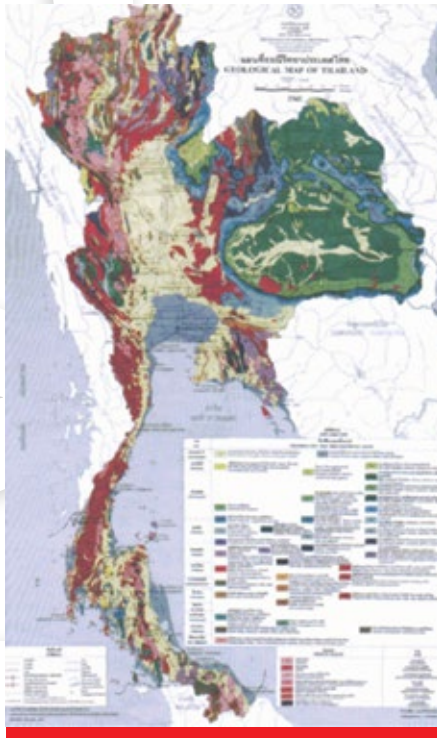


AMARIT MANEESAOVANOP
General Manager –
Aggregates, Bangkok
Siam City Concrete Company Ltd.

Aggregates in Thailand – An Introduction

Thailand has an area of 513,000 sq km, and has a population approaching 70m people. It is currently enjoying strong economic development, and its national consumption of aggregates is estimated at about 200 million tons.

As can be seen from the map, the national geology is very varied, and, correspondingly, so is the type of aggregates produced in each region. The estimated overall breakdown is around 60% crushed rock and 40% sand & gravel.

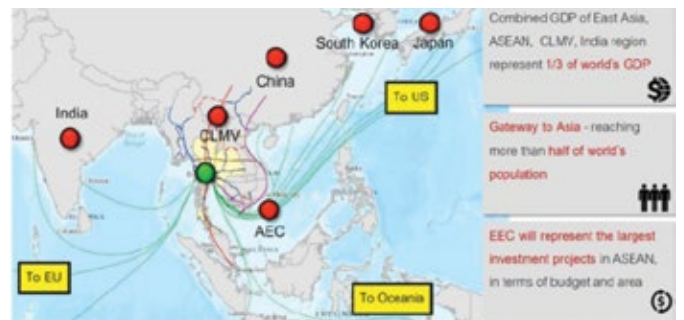


Aggregates are typically transported 150-200km to market, in almost all cases by truck; the main markets are in Greater Bangkok and Eastern Seaboard areas. There is a small amount of rock export, but no imports. There is a growing investment in new quarries, as in the examples below.



Thailand – the Strategic Gateway to Asia

As the regional map below shows, Thailand is literally the gateway to Asia, which encompasses half the world's (and fastest-growing) population. The region has huge infrastructural, housing and leisure facility demands in the coming decade.



In particular, the region around Bangkok, shown in this picture, is designated as Thailand 4.0, the Eastern Economic Corridor.

It alone will demand 120mt of aggregates in the next decade, and so will be a strong driving force for the industry in that region.



Initiative towards forming an Aggregates Association

In Thailand, we have an association of quarry crushing plants but this is not very active, as we are small, very fragmented businesses, mostly family-owned. It is still a long journey towards forming a professional national aggregates association. However, there already have been activities to strengthen the existing association relationships in order to uplift the industrial standard, and to further exchange and develop the expertise of our industry.

Being a member of GAIN will definitely benefit our national association by learning best practices from other members, which will then help accelerate our development. We will be pleased to report our progress in future GAIN newsletters.

News from Malaysia



DATO' YAP SOON HUAT

President 2018-2019 of the Malaysia Quarries Association (MQA), also Chair of the Selangor /Kuala Lumpur Branch

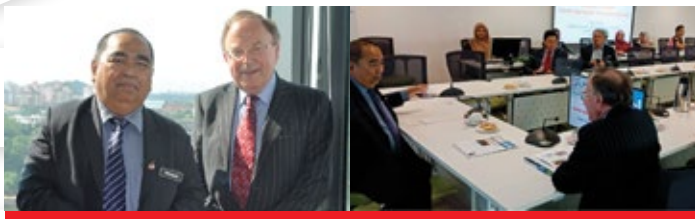
MQA becomes an enthusiastic Member of GAIN

MQA is one of the best organised, aggregates association in SE Asia, representing 80% of the industry there. In this rapidly-developing country, the quarry industry is essential in providing strategic resources to support construction and infra structural development.

Since the initial contact with MQA in later 2017, it has enthusiastically sought to fully avail of the benefits of GAIN membership. Jim O'Brien, GAIN Convenor, was invited to address the MQA Members at their AGM at their office in Kuala Lumpur in April 2019, at the end of which President Dato Yap Soon Huat presented a plaque with the theme "*Blasting Down Barriers, Promoting International Cooperation*".



A high-level meeting was also arranged with Director-General YBhg Datuk Haji Shahar Effendi of the Mineral and Geoscience Department, in which there was significant participation of his team and MQA members; all were very keen to learn GAIN best practice from the permitting, operational and sustainability perspectives.



A special visit was facilitated to the impressive Sunway Resort in Kuala Lumpur, where a former quarry has been converted to a Smart Sustainable City, under the theme of "*Waste Land to Wonder Land*", with a special presentation by COO of Sunway Property & Facility Manager, Mr.Cheng Jew Kheng. The ultra-sustainable project harnesses renewable electricity from rooftop solar panels, is waste-free and is interconnected by mass transit.



A visit was also arranged to the FYS Quarry (the "*award-winning quarry with a difference*") in Penang, notable for its very impressive public relations program initiated when threatened by encroaching building development. It also features greenhouse areas and supplies vegetables to neighbours and has a leisure zone for visitors, an agropark, a greenhouse with aquaponics & hydroponics, zodiac & horoscope, orchids, fruit, bee farm and fish pond. See their story on <https://youtu.be/bFQJQIF4Sgl> and https://www.youtube.com/watch?v=1zG_JX4AbQw, with some of their awards depicted on the front cover.



MQA leads in Corporate Social Responsibility

The MQA Selangor/Kuala Lumpur Branch believes in giving back to the community. Since 2009, the association has consistently contributed to charitable and needy organisations. In August 2019, the Branch raised a significant contribution through its Annual Charity Golf Tournament, and this time the focus was on collaboration with the MyKasih Foundation. "Through our partnership with MyKasih Foundation, we are able to reach out to low-income families in locations where we operate", the Branch President Dato' Yap Soon Huat, explained. The funds donated to the MyKasih Foundation will support 200 low-income households through a one-year food aid programme.



Learning beyond Classroom

MQA continues upgrade the skills of the workforce in the quarry industry by providing training that takes participant out of classroom to practical hands-on learning. This drilling program besides classroom learning provides each participant an excellent opportunity to experience themselves how to drill a commercial blast hole correctly with close supervision from Industry Expert of Furukawa. The Sept 2019 program was a collaboration between MQA, member Batu Tiga Quarry, Contractor LSK Construction and industry Expert Furukawa and Sunway Enterprise.



News from Indonesia



RAMAKANTA BHATTACHARJEE

Director Business Development,
PT Indocement Tunggal Prakarsa Tbk

Indonesia in a glance

The Republic of Indonesia lies in Southeast Asia between the Indian and Pacific oceans, as shown in the map below. It is the world's largest island country, with more than seventeen thousand islands totalling 1.9m square kilometres.

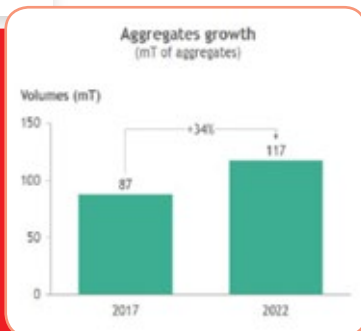


With over 261 million people, it is the world's 4th most populous country. Java, the world's most populous island, is home to more than half of Indonesia's population, while Jakarta is the capital city.

Aggregate demand in Indonesia

In terms of economic focus, the hard and soft approach is still very much part of Indonesia's economic strategy. The hard approach focuses on building infrastructure and the soft approach focuses on further streamlining regulations and improving education and skills. Infrastructural projects include new roads, airports, and railways, while smaller infrastructure projects such as sanitation, clean water, irrigation, and waste management are also in focus.

Infrastructure development in Indonesia has direct impact on Indonesia's cement demand. In 2017, Indonesia's cement consumption was about 65 million tons (mt), expected to grow 83mt in 2022. In line with cement, crushed stone aggregate demand in Indonesia is also expected to grow about 34% from 87mt in 2017 to 117mt in 2022. Western Java, which is Banten, Jakarta and West Java, contributes around 55% of aggregate demand in Indonesia with an approximate total of 48mt in 2017. Less data is available for the sand and gravel production.



Aggregates supply in Indonesia

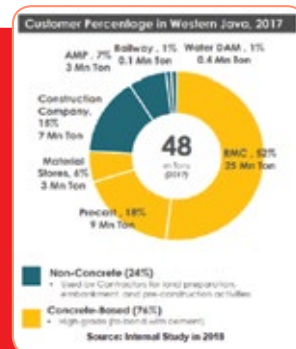
The geography of Indonesia is dominated by volcanoes that are formed due to tectonic zones between the Eurasian plate and the Indo-Australian plate. Hence, the locations of aggregate resources are scattered around Indonesia, depending on the eruption locations. In Java'sland itself, aggregates are scattered from Bojonegara, Rumpin, Cianjur, Purwakarta, South Bandung in Western Java, Batang, Kulon Progo in Central Java, Pasuruan and Jeladri in East Java. While for outside Java'sland, aggregates also can be found in Donggala in Central Sulawesi, Tarahan in Lampung, Karimun in Riau Island and Binjai in North Sumatera.

Aggregates market in Western Java

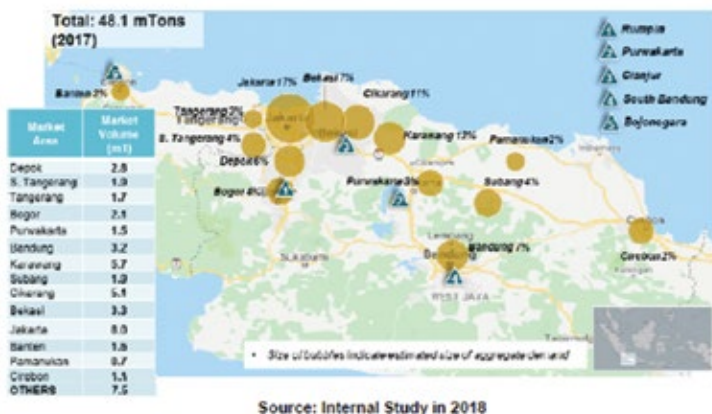
Jakarta as a capital city covers 699.5 square kilometers, located in the smallest among Indonesian provinces. However Jakarta metropolitan area has an area of 6,392 square kilometers, which extends into two of the bordering provinces of West Java and Banten.

Hence, most of the infrastructure development occurred in Jakarta, Banten and West Java or can be called as Western Java, such as High Speed Train Projects, Jakarta-Cikampek elevated toll road, and many toll road projects.

It is also reflected in aggregate consumption which is 48mt in 2017 within Western Java from total 87mt crushed stone aggregate demand in Indonesia. Concrete-based applications including ready mixed concrete, precast and material stores, dominated 76% of total demand in Western Java with 25mt, 9mt and 3mt respectively, with the rest coming from construction companies' asphalt, water dam and railway projects.



With all development infrastructures centralized in Western Java area, it is predicted that aggregate demand will grow to 57mt in 2022. Jakarta, Karawang, Cikarang, Bekasi and Depok are five biggest contributors in the Western Java market. At the moment there are five major quarry locations within Western Java market, however only Rumpin, Purwakarta and Cianjur lie within 90 kilometers of Western Jakarta, whereas South Bandung supplies aggregates to the Bandung market. The Outer Java Island markets such as Kalimantan and South Sumatera are currently being supplied from Bojonegara, Western Java and Sulawesi.



The Challenge of Access to Resources

Natural sand consumption of Jakarta metropolitan area mostly comes from Sumatera Island especially Bangka, Belitung and Lampung provinces. However, quality is a big question mark and supply is erratic especially in monsoon season. To address this situation, quarries in Rumpin area are now building washing plants to supply quality manufactured sand and there is a growing trend of usage of washed manufactured sand in the market.

Building a green field site for Jakarta metropolitan market is indeed a very difficult task due to scarcity of suitable sites and very complex and time-consuming licensing process. A new site may take 5 to 8 years to develop if land is private and take even longer if the land belongs to Forestry. In addition acquiring land is also very complicated and at times exorbitantly costly as the land acquisition bill only applies to government projects. Overall development of new aggregate site is complex, costly and time consuming whereas prices of main aggregate products are much lower compared to other APAC countries.

Towards Forming an Aggregates Association

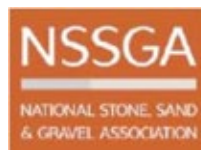
Quite different with cement business which has its own association, quarries are mostly owned by family businesses. Thus, it is a challenge to develop a professional and strong aggregate association which can help grow aggregates capacity in Indonesia. However, major cement companies are currently starting to invest in the aggregate business. Therefore we hope that an aggregates association in Indonesia can be developed easily with big companies' involvement in the near future, also encompassing the family-owned businesses. That association will then look forward to becoming an active member of GAIN.

GAIN Members



NORTH AMERICA

News from the United States



MICHAEL W JOHNSON

President and CEO of the National Stone, Sand & Gravel Association (NSSGA)

Taking Steps Towards a Clearer Water Rule

Clear directions are essential to aggregates operations. Quarries and pits across the country work with the US Environmental Protection Agency (EPA) among other regulators to properly permit activities, expansions or even green field developments. This is why we encouraged the EPA's withdrawal of an unclear rule that caused nothing but confusion, litigation and frustration among aggregates operations, other industries and even States since 2015.

The rule the Agency approved in 2015 lacked essential clarity needed for permit applications and enforcement of regulations out in the field. The 2015 rule was described as a radical expansion of the EPA's jurisdiction that would have allowed the federal government to regulate waters that have little or no connection to flowing rivers.

After years of criticism, comments and litigation from NSSGA, member companies and businesses from other industries, the EPA withdrew the flawed 2015 rule in September 2019, taking a positive step toward realizing a clearer, more achievable rule.

NSSGA has supported the administration's effort to improve regulations, such as WOTUS (Waters of the United States), that have had direct impact on the availability and costs of materials needed for vital infrastructure projects. In fact, NSSGA and our members have led on this issue and will

continue to work with the administration and Congress to get the rule right in the end. Member companies and staff submitted comments, spoke at hearings across the country and took advantage of any plan to fight the flawed 2015 rule and educate the administration on the value of clear regulations.

Andrew Wheeler, EPA administrator, said during a press event in September that withdrawing the 2015 rule is the first step in a two-step process to repeal the previous administration's overreach and re-codify the previous rule. "Today's Step 1 action fulfills a key promise of President Trump and sets the stage for Step 2 – a new WOTUS definition that will provide greater regulatory certainty for farmers, landowners, home builders, and developers nationwide."

The administration has already started working towards Step 2. EPA proposed a rule in December 2018 that provided many improvements over the flawed 2015 rule and included feedback and points from NSSGA, including exemptions for pits, water treatment systems, dry stream beds and isolated waters. NSSGA submitted comments to that rule in hopes of working with the administration to create a clear rule that can protect water and allow our operations to focus on producing vital construction materials.



Karen Hubacz-Kiley, Secretary of NSSGA's Board of Directors and Chief Operating Officer of Bond Construction Corp., in Spencer, Massachusetts, testifying during a 2018 congressional hearing on the negative impacts of the 2015 WOTUS rule.

News from Canada – Ontario



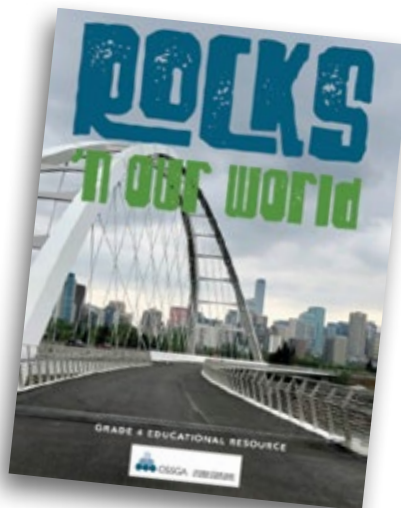
NORMAN CHEESMAN
Executive Director, Ontario Stone,
Sand & Gravel Association (OSSGA)

Rocks 'N Our World

Fall is the aggregate industry's busiest season of the year in Canada as members focus on completing contracts and supplying material before the cold weather hits. It's also a time of new beginnings, and the kids are back at school. Both are indeed linked. Research conducted by Ipsos on behalf of OSSGA two years ago told us that while 68% of people are 'aware' of the aggregate industry, only 30% really understand the role aggregate plays in all our lives. Meaning, most people do not make a connection between the gravel truck that is in front of them on the highway and the roads, bridges, hospitals and even the schools they drop their kids off at every morning.

In 2017 OSSGA launched a public awareness campaign to help the public understand that "Gravel Builds Highways" and all kinds of other infrastructure. But to truly change public perception, we recognized that it needs to start with education – in the classroom. So OSSGA asked CGC Educational Communications, who have a 25-year track record of developing and implementing award-winning educational programs, to tackle the challenge of creating a new approach to the rocks and minerals curriculum.

Rocks tell a magical story of millions of years ago. Even more magical is watching kids discover the stories in rocks. That was the experience of 230 fourth grade students who were part of the pilot test of OSSGA's curriculum-based education program we decided to call *Rocks 'N Our World*.



Students start the program by investigating how the objects in their built environment are made. They become school prospectors to find all the uses of stone, sand and gravel in their school building, yard and parking lot. They learn how brick, asphalt, concrete and glass are made. Then they engage in a math activity where they weigh the walls of their school to see how close their estimate is to the average schools' use of 13,000 tonnes of aggregate.

Later modules take students on a journey back to pre-history, to a lab environment where they learn about testing and identifying the rocks themselves and finally to designing their own rehabilitation project, students get the full scope of how 'rocks rock their world'.

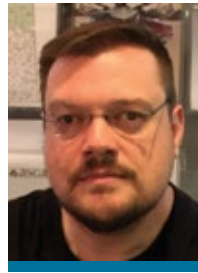
The over-arching purpose of this education program is to help people in communities understand the necessary trade-offs that allow us to have a well-built, man-made environment that uses the best and most accessible natural resources that we are blessed to have in Ontario.

The new curriculum was piloted in six schools in the past year and will be actively marketed to schools at teacher conferences and professional development days this Fall. Our target is to see the program picked up in 20 schools by next year, doubling each year for the next 4 years. An ambitious goal, but today's students are tomorrow's decision-makers!



News from Canada – Alberta

Article submitted by Anthony Murdoch,
Communications and Events Coordinator, ASGA



JOHN ASHTON
Executive Director, Alberta
Sand & Gravel Association (ASGA)

Regulatory Uncertainty of Aggregates in Alberta – Submitted by the ASGA

The province of Alberta, Canada, has had environmental standards and legislation in place for the development of sand and gravel pits as early as 1978. With increasing awareness of environmental impacts on development, implementation of current regulations are changing faster than the actual policies in many cases. For Alberta, this has led to regulatory uncertainty when sand and gravel operators prepare to develop an area for extraction. The regulatory ambiguity causes delays in the development while increasing costs and timelines.

Knowing this challenge, the ASGA Land & Environment (L&E) committee decided to focus its efforts on isolating and identifying the regulatory process with Alberta Environment and Parks (AEP), which is the Alberta ministry responsible for regulating the aggregates sector.

This process started in January of 2019 when the L&E committee focussed on mapping out the entire application and approvals process to identify areas of delays and inconsistencies.

"This report will highlight areas of concern facing Alberta's aggregate industry when it comes to the Provincial approvals process, mainly delays and inconsistencies that can be very costly," says Dale Soetaert, ASGA President. "Our ultimate goal is to work with the Government of Alberta to help find solutions to the historic problem of application approval delays and inconsistencies, and this report will help prioritize and guide that discussion."

The L&E sub-committee hopes to have ready for release in fall of this year. The report will include recommendations on how to resolve the many areas of constraints placed on the industry due to the unnecessary regulatory burden encountered by the aggregates industry in Alberta. Lesley Foy, ASGA L&E Committee Chair notes that although the report has taken a lot of time and effort to get the final draft stage as it sits today, it became something more substantial than the committee imagined.

ASGA L&E Chair Lesley Foy notes that she is proud of the work done by the sub-committee and happy with the progress of the report, in addition to all the hard work that went into compiling all the regulatory processes. She also notes that the report will still serve as a training tool and reference guide for the industry to identify pinch-points throughout the system.

ASGA President Dale Soetaert is looking forward to the release of the report, which he feels will help highlight the problems that exist with approvals delays in industry. "I am very impressed with the time and effort the Land & Environment Committee has done to create this report, and on behalf of the ASGA board, I want to thank them for their dedication and investment as they work on finalizing the ultimate draft," said Soetaert.

The ASGA hopes to have the final version of the report ready for release in mid-November.

Both Soetaert and Foy stress that they feel this report is an opportunity to increase the level of collaboration between gravel producers and government so that the industry can better plan for the future and get projects on the go. To learn more about the ASGA and the aggregate industry in Alberta, visit www.asga.ab.ca for more information.



Providing essential sand & gravel.....



Later restoration as a fish pond.....

News from Canada – Forming a National Association



BRENT MORREY

President, APAC
(Aggregate Producers of Canada)

Breaking News - Forming the Aggregate Producers Association of Canada (APAC)

For the first time, leaders from the three existing provincial aggregate associations in Canada got together for an informal social gathering in Vernon, British Columbia (BC) in May 2019. The gathering conveniently coincided with BCSSGA's annual general meeting, so members from Alberta and Ontario could sit in and learn on some of the ongoing activities and priorities with aggregate producers in British Columbia.



The first meeting between the three provincial aggregate associations in Canada (from left to right): Dale Soetaert (ASGA President), Derek Holmes (BCSSGA Past-President), Norm Cheesman (OSSGA Executive Director), Tyson Craiggs (BCSSGA President), and Brent Morrey (APAC President) in Vernon, BC in May 2019.

Following a similar idea and format to GAIN, the three associations provided a brief overview of their respective organizations with open discussions and sharing of ideas on how each province is approaching various topics in the industry across the country. The meeting was an immediate success and the idea to form a national aggregates association was welcomed and immediately supported by the three provinces present.

Although BC, Alberta and Ontario represent more than half of the estimated 400 million tonnes of annual aggregates production in Canada, to form a national association, it only seemed natural to find representation of aggregate producers in other parts of the country. The next couple of months involved an outreach campaign to aggregates

interest groups within the other provinces for their support and future involvement. Despite not having their own formal associations dedicated to the aggregates industry, it was discovered that all the other provinces had subcommittees and/or task groups that undertook aggregates topics and issues within their heavy civil, construction or roadbuilders associations.



We have now established key contacts and participation in the Aggregate Producers Association of Canada (APAC) from nine of the country's ten provinces (exception Prince Edward Island, where the vast majority of aggregates are imported.)

Due to geographic and financial limitations, correspondence has been restricted to conference calls and emails, however the first official APAC meeting is scheduled to take place in February 2020 in Niagara Falls, Ontario, hosted by the OSSGA at its AGM.

Although still very much in the development phase, APAC has made significant progress since the idea began in May, and it is quickly gaining momentum. Over the course of the next few months, APAC will be focusing on establishing a logo and creating a website, as well as finalizing the association's mission and objectives.

News from Mexico



AURELIANO MARTÍNEZ SCHMIDT
Director of ASEC, Nuevo León, Mexico

Update on Implementation of National Regulations

We have spent much time as ASEC this year 2019 in continuing to implement the new regulations and improving good neighbor relations in cooperation with the Secretary of Sustainable Development of the Government of the State of Nuevo León. We have also supported infrastructure investments that have been required to be carried out by the extractors to comply with the new environmental standards, all I am very pleased to say, with excellent results and achievements by the extractors of stone material.

Currently, in Mexico, the extraction of stone material is being regulated with the environmental standard NAE-SDS-001-2017. This was applied in the beginning of 2018 in the metropolitan areas of the city of Monterrey, notably being the first federal entity of Mexico to carry it out, together with the active participation of academic entities, environmental experts, industrialists of stone and state officials of the environment secretary department.

Towards formation of a National Aggregates Association

We still remain very firm in our plans to form a National Aggregates Association of stone extractors next year; in 2020, we therefore expect it to be a reality. We have been working in parallel with interviews and meetings in different parts of the country, approaching the main producers of stone and sand material in Mexico by federal entity, talking with them about their ideas and problems, a list of is also being prepared as well as updating volume and production information.

National Campaign against Illegal Sand Extraction.



A report on the illegal extraction of sand and stone material in Mexico and its consequences was sent to the UN environment last August 2019.

The Ministry of Environment and Natural Resources only has a record of three sand mining concessions on beaches, with or without permission, but sand traffic is a reality in Mexico.



Between 2013 and 2018, the Federal Attorney's Office for Environmental Protection of Mexico (Profepa) obtained 89 complaints for the extraction of sand in the country, with the Oaxaca, Chiapas and Jalisco regions leading. Some cases were so serious that the complaint referred to "extraction of stone material from the bed of the Amecca River (Nayarit), destruction of mangroves and modification of the natural channel".

In its February issue, Obras magazine addresses the theft of sand on Mexican beaches, where the price for a cubic meter of sand, in Baja California Sur, for example, is about 200 pesos. It is "almost laughable," warns Saul Chavez of the Northwest Biological Research Centre. But in the market, its value easily scales; especially if it is for export. "In the United States (EU) the price is doubled or tripled; it is very profitable," he says.

Summary of the main consequences of illegal aggregate extraction are known to include:

- Biodiversity impacts on extraction sites and related ecosystems (riparian flora and fauna in the river estuary).
- Sediment losses, both inland and on the coast through erosion.
- Hydrological function; change in water flows, flood regulation and sea currents
- Water supply interruption through the decrease of the water table and pollution.
- Infrastructures; damage to bridges, river embankments and coastal infrastructure.
- Weather; directly through transport emissions, indirectly through alteration of the microclimate by modification of the hydrological cycle.
- Landscape; coastal erosion, changes in delta structures, river pollution.
- Reduction of protection against extreme events (flood, drought, storm surge).

ASEC and its members are strongly committed to responsible extraction.

CENTRAL & SOUTH AMERICA

News from Colombia

In Colombia: The construction growth pact energizes the aggregates industry

More than a year ago the national government took office, giving impetus to the infrastructure projects that had been drawn up by the previous government. Similarly, local governments are in the final months of their mandate, which means speeding up public works construction projects in municipalities and governorates.

In this regard, the President of the Republic, Iván Duque and the Vice-president of the Republic, Marta Lucía Ramírez, signed the Pact for the Construction Growth, with ASOGRAVAS and other representatives of the sector's associations, the objective being to improve the economic conditions of the sector, through the intervention of 15 key topics that allow to maximize the potential of the construction industry.



The association is optimistic and we hope that the next five years will be focus on growth in the demand for building materials. The most recent Study of the Economic Unit of ASOGRAVAS, shows that is expected to reach 186 million tons of production of these materials by 2023 (with the anticipated growth trend shown in red in the graph)

In addition, the industry has several challenges to ensure the supply of these materials. First, to improve the efficiency and productivity of production plants; also, to optimize operating conditions in terms of industrial health and safety, and finally, to guarantee the obtaining

of the respective social and environmental licenses, since in most cases, these operations are close to population centres.

Along these lines, in ASOGRAVAS, we have started several joint projects with the national, municipal & departmental governments, which will make it possible to grant tools for the renewal of territorial permissions, through the regional plans, in order to include the extractive activity close to the consumption centres.

On the other hand, in order to improve social, environmental, health and safety conditions, the association is working on the elaboration of a series of methodological guides that will facilitate industry implementation, and to help the authorities to make improvements in the areas of audit, monitoring and follow-up, so that these are more effective and less discretionary.

The association hopes to present these important documents in the framework of the 6th trade show of the aggregates industry, which will



CARLOS FERNANDO FORERO BONELL

CEO, ASOGRAVAS, Colombia

take place in April 22 to 24 of 2020, at the Valle del Pacífico Event Centre in Cali, Colombia.



In the framework of this event, which will have an industrial exhibition area of 3,000 square meters, will be presented the most important suppliers of goods and services of the industry, who will tell us about the latest advances in machinery for the development of extractive activity, processing, crushing, transport, logistics, services associated with environmental management, industrial health and safety, among others.

In addition, the Study of Supply of Aggregates will be presented in the most important cities of Colombia, which will allow us to have certainty of the supply capacity that the industry will have for the next years. There will be significant growth that demand, based on projects such as the first line of the Bogotá Metro, for which an estimated consumption of 6 million tons of aggregates for its construction, as well as more than seven bus-only lines, repairs to the road network in the country's main cities, creating better passenger mobility and several relevant projects in the areas of sports, health, education and culture. This is the overview that we hope to launch for the next year with the new local administrations.

On the other hand, one of the priorities during the last two years, which will continue to be fundamental in ASOGRAVAS, is the "Buy Formal, Build Legal" campaign, which seeks to reduce informality and illegality in the sand and gravel sector in the country.

With this initiative, we have managed to reach more than 10 departments, with the support of the National Mining Agency, the Ministry of Mines and Energy, the environmental authorities, the National Tax Direction and the Army and National Police authorities.



The campaign seeks to reduce the harmful 60% of informality and illegality that exists in the supply of building materials, which has harmed the conditions of competition of the many formal producers established in the country, who pay all their taxes and who filled all the required standards. This issue was included as a priority theme in the mentioned Pact for the Construction Growth, with it is hoped will give a greater impetus by Colombian entities in the coming months.



News from Argentina

Córdoba will host the GAIN 2020 Meeting

In November 2020, on the 8th of November 2020 to be more precise, the Federación de la Piedra, the Argentine Aggregates Association, will be heartily welcoming all GAIN members to the 6th GAIN biennial meeting in Córdoba, one of the most important cities in Argentina.

The outline program for the GAIN 2020 meeting at the Hotel Quorum (pictured below) is:

- Sunday, 8th November, evening reception, welcome and "ice-breaking".
- Monday 9th and Tuesday 10th November, GAIN Meeting (see outline program).
- Wednesday 11th November, quarry visits, then optionally join the IV Argentinian Congress On Aggregates & Expo Aggregates.



We in the *Federación* will be truly proud to be receiving you, dear GAIN Members, in Córdoba, a province renowned for its rich deposits of non-metallic minerals, and in particular for it being one of the principal producers of crushed stone aggregates in our country.

We are already advancing with all the detailed arrangement for the GAIN meeting, where you will receive the special welcome so typical of the people of Córdoba. Not only in what we will share and learn in the meeting interactions, presentations, dialogue and discussions, but also in the very special experiences our country can share with you as visitors.

This note is intended to give a preliminary outline of the program, an outline of the travel arrival options and a bit of economic background to Argentina.

To start with the economic situation in Argentina, probably all which you have read in the newspapers is true! Our country is once again experiencing a deep crisis, and additionally we are having Presidential elections. As you might know, there was considerable surprise at the outcome of the Primary Elections (PASO) held in August, reinforced on the October election in which Alberto Fernández, from the former dominant party, was elected president with the 48% vote. The PASO caused a loss of confidence in the financial markets, which had already been frail, which in turn has caused a serious economic downturn this year. Our economy in the last 4 years had already been noted for high inflation, a slowing demand, increasing unemployment and poverty.

Fortunately, these effects were initially softened in our Province due to ongoing road works for a period of 6 months, however those works have now been put on hold and no new works are being initiated. Even apart from the results of the recent Presidential election, we anticipate that recovery will be slow, and it will be some time before the crisis is past us.



HERNÁN SONEYRO
Director of CEMINCOR, Córdoba



JOSÉ ALFREDO PIZONE
Vice-President of Cámara de la Piedra, Province of Buenos Aires, also President of the national Federación Argentina de la Piedra (FAP)

Despite all those economic woes, we in the Federación wish to assure you that the GAIN meeting will nonetheless definitely take place. Argentina has gone from crisis to crisis in the last 70 years, so we are well skilled in surviving, and we will not allow economic turbulence to change our plans!

As regards your travel itineraries, getting to Córdoba is very easy. Córdoba has excellent air connections via several international airlines. There are direct international flights to Córdoba from Madrid, Miami, Santiago de Chile, Panamá, Lima and São Paulo. Of course, there are also frequent domestic connections through the capital city, Buenos Aires.

As regards accommodation, there is the Quorum Hotel where the GAIN meeting will be held, just a short distance from Córdoba airport and right beside the Convention Centre where the Argentine Congress will take place. There are also several other high-quality hotels in downtown Córdoba; more details on all options will follow in due course.



For those who bring their partners, we can assure that we are preparing a program filled with activities for all tastes and interests. The Province of Córdoba is famous for its natural beauty and history, so we can offer nature walks, horse-riding, guided visits to bird sanctuaries and to the Jesuit legacies of the region, lunches in the splendid colonial estancias, where you can enjoy the legendary Argentine welcome, wine and beef.



After the GAIN meeting and Congress, you could enjoy any of the many touristic options for which Argentina is famous. But remember that our country is very large, there being 4,345km La Quiaca in the north and Tierra del Fuego in the south. But there are good internal flight connections, and being November, it will be almost summertime here!

So please ensure that you now firmly put the GAIN meeting dates of November 8-11 in your 2020 diaries! We will be circulating more detailed information within 3 months so you can then start making your detailed travel plans. See you in Córdoba!



Draft Agenda for 2020 GAIN Meeting, Córdoba, Argentina

DATE/SESSION	TITLE	CONTENT
Sunday Evening, November 8	Informal Welcome Reception, hosted by Hernán Soneyro and José Alfredo Pizone	Introductions and "ice-breaking"
Monday Morning, November 9	Welcome by the hosts, CEMINCOR and Cámara de la Piedra	By President Hernán Soneyro & President José Alfredo Pizone
	Opening of Meeting, Roundtable Intros	Jim O'Brien
	Regional Introductory Presentations, 15 minutes each, covering production trends, key regional issues	Heads of each GAIN member association, outlining its key developments, challenges and opportunities
	Buffet Lunch, Cruz de los Vientos	
Monday Afternoon, November 9	Key Operational Issues – 1: Access to Resources, Manufactured Sand, River-Dredged Aggregates, Combating Illegal Sand Extraction (UNEP Report)	Brief keynote presentation by a GAIN expert, followed by roundtable discussion
	Key Operational Issues – 2: RCS Regulation, Safety, Air Quality, Restoration, Biodiversity & Water Use	Brief keynote presentation by a GAIN expert, followed by roundtable discussion
Monday Evening, November 9	GAIN Dinner, Traditional Gaucho Style in the Restaurant Rancho Viejo	Continuing Informal Discussions and Exchanges of Best Practice!
Tuesday Morning, November 10	Trends in Aggregates Markets: Regional Forecasts, 20-30 year Resource Planning, Competing Products, Circular Economy, Taxation, Certification	Brief keynote presentation by a GAIN expert, followed by roundtable discussion
	Trends in Aggregates Production: Equipment Technology, Plant Optimisation, Digitisation to "4.0", Recruitment & People Development	Brief keynote presentation by a GAIN expert, followed by roundtable discussion
	Buffet Lunch, Cruz de los Vientos	
Tuesday Afternoon, November 10	More Effective Associations: Management Best Practice, Adding Value, Partnering with Governments/Authorities in Infrastructural Development	Brief keynote presentation by a GAIN expert, followed by roundtable discussion
	GAINing more from GAIN: How can GAIN add even more value for the global aggregates industry? Improving Industry Image & PR	Open Discussions/Brainstorming Wrap-up and Conclusions. Suggestions for 2021/22 Meeting
Tuesday Evening, November 10	GAIN Dinner, Contemporary Argentine Cuisine, Restaurant Standard 69	Continuing Informal Discussions and Exchanges of Best Practice!
Wednesday, November 11	Quarry Visits for GAIN Attendees, etc. Attendees then optionally join the Argentine Congress which continues on Thursday November 12.	Continuing Informal Discussions and Exchanges of Best Practice!

Some Views of Córdoba City and Province



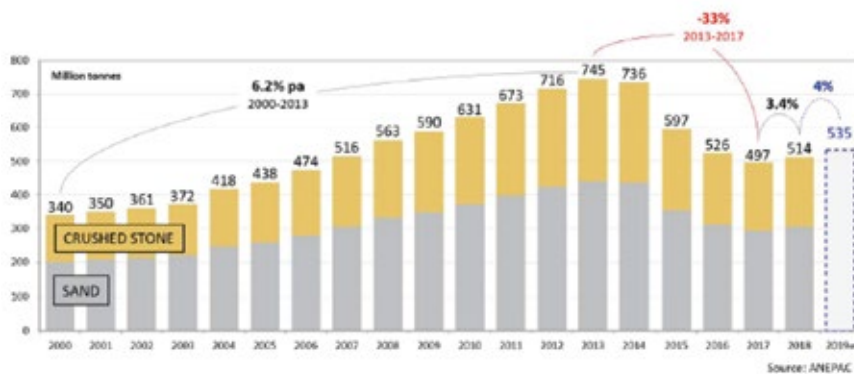
News from Brazil

Aggregates in Brazil: Still Far from Recovery

Demand for aggregates in the country increased 3.4% in 2018, reaching 514mt (million tonnes), comprising 305mt of sand and 209mt of crushed stone. After a long period of decrease in aggregate consumption, around 33%, 2018 can be considered a milestone in the redemption of the aggregate industry after 4 consecutive years of steep decline in production, revenues and investments.

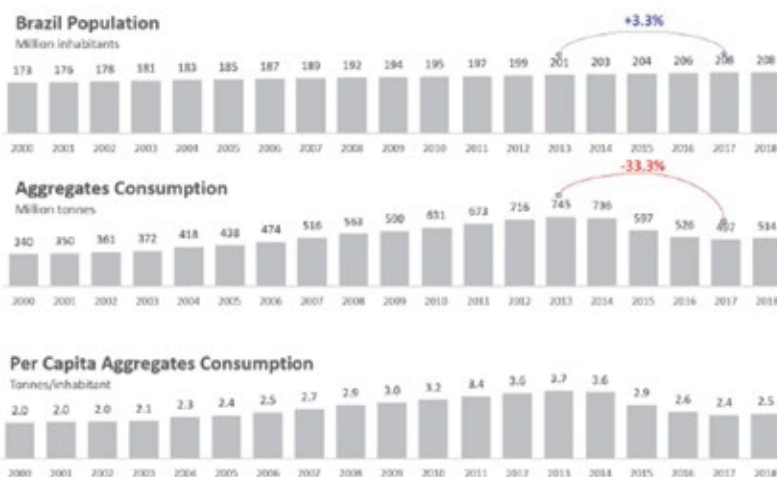
In the state of São Paulo, the largest aggregate market in the country, sales in the first half of 2019 increased by 4% over the same period in 2018. This growth also occurred in other important consumer regions of the country indicating that this year may close with a 4-5% increase.

2000-2018 Aggregates Consumption and 2019 Forecast



At the same time, in the cement sector, according to the National Cement Industry Union (SNIC), cement sales between January and August 2019 totaled 35.9mt, an increase of 2.9% compared to the same period last year. In August alone, sales registered 5.1mt, an increase of 3% over the same month of 2018. Indicators are recovering. GDP from construction began to react in the second quarter, as did building materials sales. In addition, 2018 numbers positively surprised the mining and construction machinery and equipment sector. Sales growth is expected to be 4% in 2019.

Overall, the business environment is more favorable, showing a greater consistency of the resumption movement. Complicating factors may be the external environment based on the China-US trade issue as well as the recent oil conflict between Iran and Saudi Arabia that could have negative effects on economic activity.



FERNANDO VALVERDE
CEO, ANEPAC, Brazil

One issue that impacted the Brazilian Mineral Sector was the collapse of Vale's tailings dam in Brumadinho, in the state of Minas Gerais, just over three years after another tragedy involving mining company Samarco (a joint venture between the Brazilian mining company and BHP Billiton) in Mariana, also in Minas Gerais.

The impacts of these events affected the Brazilian mining industry as a whole, what can be easily observed in the National Congress, which, since the accident, presented 78 bills to strengthen the supervision and punishment of mining companies that violate the Mining Code and the environmental laws. For the aggregates sector, additional costs arose reflecting the increase in prices. Several crushed stone and sand mines are switching to dry process technologies to avoid dams.

Despite the relatively upbeat mood, the segment suffers from the lack of infrastructure works that generate the highest aggregate demand, especially the urban mobility works such as subways, highways, etc. The crisis has a harder impact on the construction sector. While there is some positive news, such as an increase in the number of building launches in São Paulo, unemployment in the sector is disappointing, worse than most industry sectors.

As governments have no cash to invest, few public works are being conducted. Worse, there are between 8,000 and 12,000 public works stalled for lack of funds. In other words, investments have not kept pace with population growth. Between 2013 and 2017, while the Brazilian population grew by 3.3% from 201 million to 208 million, aggregates consumption decreased from 745mt to 497mt. Similarly, per capita consumption reduced from 3.7t (tonnes) in 2013 to 2.4t in 2017.

The federal government plans a round of concessions, but even if successful, the results are not immediate. Thus, it remains for the federal government and especially the Ministry of Economy the arduous task of running the fiscal agenda with an iron fist.

MIDDLE EAST

News from the United Arab Emirates



JEAN-FRANÇOIS MILIAN

Business Development & Exploration Manager for Stevin Rock LLC, a company owned by the Government of Ras Al Khaimah in the United Arab Emirates (UAE)

A Busy and Successful Year 2019 so far for Stevin Rock

2019 has been a busy and successful year so far for Stevin Rock. The Company continues to grow to remain a leader in the quarrying industry in the United Arab Emirates and beyond as one of the world's largest rock producers with a capacity of over 80 million tonnes per year.

On the domestic front, Stevin Rock was awarded in March 2019 an important contract worth USD 113 million for the supply of rock to the Ghasha artificial island construction project of the Abu Dhabi National Oil Company, designed to develop, drill, and produce gas from the Ghasha offshore concession, confirming once again Stevin Rock as a major supplier of high-quality rock material for strategic government projects.

Stevin Rock and to some extent other quarries in the United Arab Emirates benefited from the development projects related to the forthcoming Dubai Expo 2020 with the supply of large amounts of construction sand and aggregate.



A large number of new mobile equipment, in particular haul trucks and excavators, was purchased by Stevin Rock to handle the increase of production and to further improve the efficiency of the Company's operations, this included a 240 ton Caterpillar 6020 prime loading excavator, the largest in operation in the region, seen here in action in Stevin Rock's Khor Khuwair limestone quarry.

Production of white beach sand started at Stevin Rock's Al Ghail dolomite limestone quarry earlier this year (upper picture) and has aroused lots of interest from real estate developers in the UAE and abroad. It was first used in April 2019 at the prestigious Al Hamra International Convention Center in Ras Al Khaimah (lower picture) for the Arabian Hotel International Convention when delegates from all over the world had the opportunity to admire the quality of this new product.

In China, Stevin Rock proudly won the Product Quality award at the 4th National Aggregates Competition organized by the China Aggregates Association for its limestone sand and aggregates (picture below) and was the first and only foreign company to participate to such competition. A delegation from the China Aggregates Association headed by its president Mr Hu Youyi visited Stevin Rock's operations in April 2019, strengthening the ties between the Company and the Association (bottom picture)



AFRICA

News from South Africa



NICO PIENAAR

Director, Aggregate and Sand Producers' Association of South Africa (ASPASA)

The State of the Nation

During 2019, South Africa held a national election and a new President was elected. Since then the economy has been rather lethargic, and much-needed spending on infrastructure has been very slow; ASPASA members are taking the strain.

For South Africa to get its mining industry (including quarrying) back on track, certain issues need to be urgently addressed. As a general background, the mining industry (originally focused on copper, diamonds and gold) in South Africa, once a mighty economic force, is on a downward slide. It is seldom realized that the most mined material is aggregates, which are, in the context of the legislation, relatively small surface mines. Operators of such quarrying activities provide essential local jobs, but do not have the financial muscle to comply with the complex legislative requirements of traditional mineral mines. Hence there is a temptation to opt for the "grey" sector, against which ASPASA is actively campaigning.

ASPASA has therefore highlighted the following areas for particular urgent attention:

- Establish trust between the Government, Business and Labour.
- There needs to be a serious crack-down on corruption, illegal operations and unethical leadership.
- The mining licensing system needs to be improved and time limits must be addressed.
- Various laws need to be addressed for simplification, as smaller surface mines (like quarrying) are totally swamped with complicated laws.
- Infrastructure spending needs to be prioritized.
- The recurring electricity supply problems need to be urgently resolved.
- There is a need to establish much better relationship between mining activities and communities.
- The Government needs to understand the very important national economic and social role played by the small-scale surface mining players.

So despite the so-called "new dawn" in the politics of South Africa, it is still evident that negativity prevails in peoples' minds, and the extractive industry is no exception. As ASPASA Director Nico Pienaar says: "The answer ultimately must be achieved by:

- We must talk more to one another – some call it a culture of engagement.
- Adapt to the environment, understanding your people's fears and try to be positive.
- Always focus on solutions and set goals for yourself and your colleagues; never throw in the towel!"

ASPASA Activities

On health and safety, ASPASA continues to be very active and relevant. The ASPASA audit process is helping member companies in complying with legislation. ASPASA has also developed an additional guideline that focuses on Occupational Health and Safety legislation which applies to all factories, workshops and office; the guideline will be launched in January 2020.

On the environmental side, ASPASA is contracting a new audit process which is focusing on legal compliance rather than good housekeeping, as legal issues close operations and hence ASPASA is now focusing on these. Good housekeeping of course always remains an absolute prerequisite of excellence in environmental and safety performance.

Technical and quality issues are being addressed by a new auditor that focuses on laboratories and testing of products. This focus is crucial to ensure the consistent and reliable quality of the products put on the market, essential to ongoing industry reputation.

ASPASA also engages in a wide range of activities on behalf of its diverse membership, all designed to be of real value to all its members.

Recent Institute of Quarrying Event in Durban in April 2019

ASPASA was actively involved in this year's IOQ Conference in Durban, where several ASPASA members received safety awards.



OCEANIA

News from Australia



KEN SLATTERY

CEO, Cement, Concrete, & Aggregates Australia (CCA)

CCA Celebrates 90 Years with 10 Most Outstanding Concrete Works Announcements

As part of the association's 90th year, CCA recently announced Australia's **10 Most Outstanding Concrete Public Architectural Works**, as selected by a panel of industry experts.

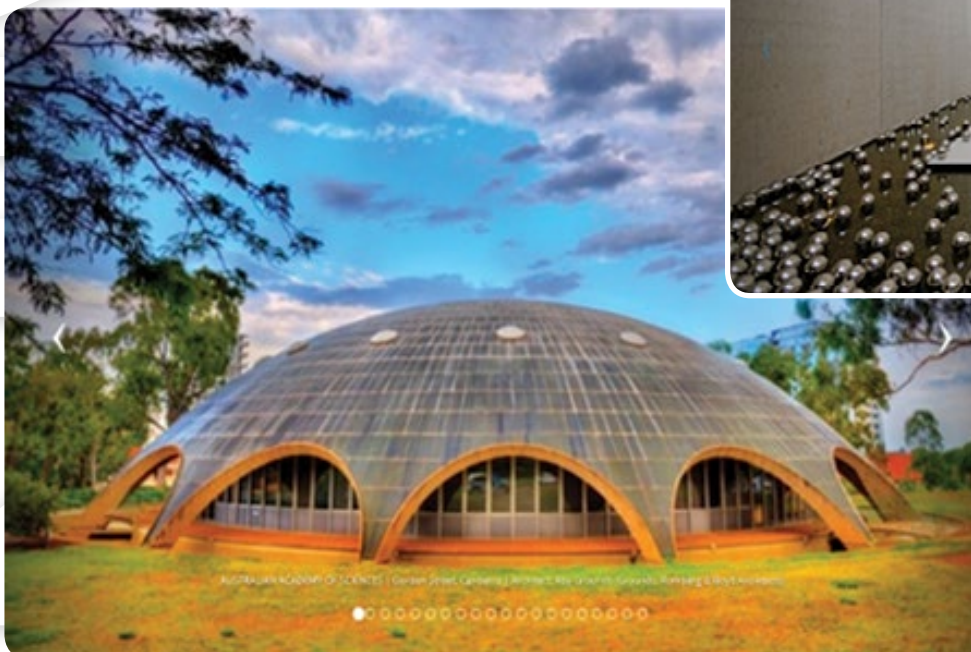
The list was unveiled at an official media launch held at the Sydney Opera House gaining very strong media attention across national newspapers, TV, Radio & trade publications. Estimated potential reach for the campaign was 6.4 million (25% of Australia's population).

"To mark our 90th year, we embarked on a quest to find Australia's most important and distinctive concrete public architectural landmarks, highlighting the central role that concrete has played in Australia's urban landscape throughout the past nine decades," said CCA CEO, Ken Slattery.



The list highlighted the aesthetic, environmental and social contributions concrete has made, and continues to make, to Australia's urban landscapes since CCA began. Some of the structures in the list sit in harmony with the landscape, while others are proudly uncompromising; some have "brutalist" geometric composition while others have continuous free-flowing forms, but all capture the limitless potential of concrete.

The **10 Most Outstanding Concrete Public Architectural Works** are: Australian Academy of Sciences | Australia Square | Gladesville Bridge | High Court of Australia | James Cook University Library | Melbourne University Carpark | Punchbowl Mosque | Queensland Art Gallery | Sydney Opera House and Victorian State Offices.



TV series Australia By Design, Architecture delivers again as a showcase for concrete's versatility, beauty and sustainability

Now in its third year and with CCAA as a principal sponsor, Australia by Design uncovers outstanding projects that exemplify excellence in Australian architectural design. Reaching over 1.9 million viewers, the series culminates in a 'best of the best' final episode, where one project is named Australia's ultimate architectural statement of the year.

Although concrete has featured in some way, shape or form across this year's Top Ten, there are a number of projects (in addition to Lune De Sang) that stand out for their exploration of the material.



Kate DuPreez, Mine Safety Commissioner Queensland, presenting the Diversity and Inclusion Award to representative of Hy-Tec Industries

Innovation on Show – 2019 State CCAA Innovation Award Winners Named

The State winners were announced at dinners held across the country over recent months. These events were attended by members, guests, government representatives, sponsors and industry and all winners are now eligible to compete for national awards at CMIC20.

CCAA introduced a new award category to the 2019 program – *Diversity & Inclusion* – alongside *Environmental Innovation*; *Health & Safety Innovation* & *Community Engagement*.

"As our industry moves to realise the social and economic benefits that diverse and inclusive workplaces offer, we have introduced a new award category that recognises innovative approaches to strengthening Diversity & Inclusion in our industry", said CCAA CEO, Ken Slattery.

CCAA strongly believes in the value of the awards program, where sharing of new ideas and approaches across common challenge will create a better industry and one that is safer, more sustainable and more in tune with the society we serve. Nearly 140 entries were submitted across all states in this year's round of awards, with 17 in the *Diversity & Inclusion* category.

Respirable Crystalline Silica

Workplace exposure standards for Respirable Crystalline Silica (RCS) have been a major focus for extractive and construction industries over the past several months in Australia.

Safe Work Australia, the national occupational health and safety organisation has responded to union and regional government pressure by proposing significant reductions in the Workplace Exposure Standard (WES) for RCS across Australia.

This follows a significant increase in the number of cases of silicosis being diagnosed amongst workers cutting and polishing stone and composite stone benchtops for domestic kitchens and bathrooms which have rapidly gained in popularity over the past two decades.

These materials often have very high silica contents (compared to concrete and aggregates) and when dry cut or polished give rise to levels of respirable dust well beyond the current WES of 0.1mg/m³ over an 8-hour time-weighted average exposure period.

Based on available contemporary medical evidence, Safe Work Australia has therefore declared that retaining the current WES of 0.1mg/m³ is not viable and that to avoid all known and possible health impacts, the WES must be reduced by 80% to 0.02mg/m³ over the same 8-hour time-weighted average. However, recognising that it is not possible to reliably measure down to this level with any accuracy, an interim position of 0.05 mg/m³ has been recommended until measurement technology permitted further reduction.

If the workplace exposure standard were to be reduced to this level then this will have significant impact on quarrying and construction activities without necessarily improving on an already very low level of incidence of dust-related disease in those industries. Industry advocacy therefore continues and a decision is expected soon, but it is anticipated that the WES will be reduced to 0.05m/m³ in the coming weeks. CCAA remains strongly committed to protecting the health of employees in the cement, concrete and aggregates industries through supporting appropriate protection measures to comply with that limit.

News from New Zealand

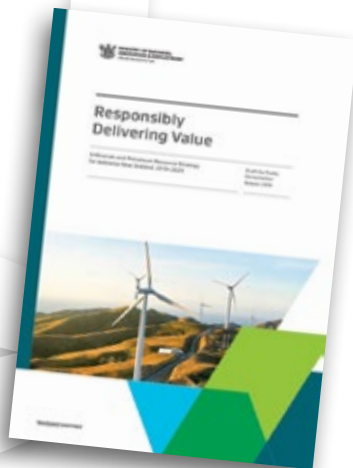


WAYNE SCOTT
Chief Executive of the Aggregates and Quarry Association (AQA) of New Zealand

AQA lobbies on 10 year Resource Strategy

AQA have been heavily involved in assisting the Government with its draft strategy, Responsibly Delivering Value – A Minerals and Petroleum Resource Strategy for Aotearoa New Zealand: 2019-2029.

Projections indicate that the population of New Zealand could grow as high as between 5.3 and 7.9 million by 2068. This could increase demand for aggregates on 2018 population by 18 – 75% (8 – 34 million tonnes per year). Critical to the Strategy is ensuring the country has the aggregates (crushed rock and stone) required to build the foundations of our houses and roads. We currently do not have a complete understanding of our entire stock of resources and it is therefore important this strategy identifies future aggregate reserves and puts strategies in place to protect access to them in the future.



In our transition to a carbon neutral 2050 there will inevitably be a reduction in the use of fossil fuels however the government is intent on ensuring demand is met for essential energy and infrastructure while we navigate this transition.

Complementing this strategy is one on Biodiversity which is aimed at addressing concerns over the rate at which nature is declining and the impact of this on people and the environment. This will put added pressure on the aggregates sector to even further lift our game on mitigating – and even enhancing – our impact on the environment.



Changes at AQA board

The AGM of the AQA took place at the QuarryNZ conference in July and there was some changing of the guard. Jared Johnston stood down as an AQA Board member and chair to be replaced by Fulton Hogan colleague Peter Walsh on the board. Also stepping down were George Kelcher and Brett Swain. The AQA Board will now continue with six members rather than the previous eight. Peter Walsh was subsequently elected as AQA chair with Mike Higgins continuing as deputy.



From left: AQA CEO Wayne Scott, Chair Peter Walsh, and Deputy chair Mike Higgins.

Time to honour the pioneers and recognise the future – Celebrating AQA-50

While unable to join us in person, two of our founding fathers Jim Hunter and George Cunningham, sent best wishes to all via video at our 50th anniversary gala dinner in Christchurch during October. The venue was chosen to recognise how Christchurch is progressing from its disastrous earthquakes of 2010/11. Our major focus was our own future progress as a dynamic and successful organisation. J Swap Contractors generously were our principal sponsor, supported by Holcim, Fulton Hogan, Wirten Group, Golder, MITO and Quarrying and Mining magazine.

The evening included a keynote address by GAIN Convener, Jim O'Brien, demonstrating the many benefits of GAIN membership; he urged AQA to pragmatically plan for the future, in that the supply of sustainable, high-quality aggregates was essential to the future of New Zealand and the wellbeing of its people.

Another highlight of the evening was the announcement of the winners of our Rock our Future competition. School children were challenged to design how a quarry might look in another 50 years' time. Two groups (shown below) from Fitzroy Primary School in New Plymouth shared the winning prize. The exercise brought home to the children the real challenges of designing and operating a quarry, not least in supplying its energy needs. Our future will be safe in their hands.



EUROPE

News from Europe



DIRK FINCKE

Secretary-General, European Aggregates Association (UEPG)

New European Parliament and European Commission

Every five years, elections are held across Europe to elect the new European Parliament. The most recent was in May 2019, and now 751 Members are taking up their jobs, most of them organised in 7 political groups, with 44 Delegations and 22 Committees working on specific policy areas. The new President of the European Parliament is the Italian David Maria Sassoli from the Social Democrats Party.

Out of this process, the political groups then propose their choice for a 'Spitzenkandidat', to be the new President of the European Commission (the civil service of the EU). But in parallel, the Heads of the EU Member States, as the European Council, also had their part in the nomination of Ursula von der Leyen, a Christian Democrat from Germany, as the first female to lead the European Commission, for the next five years.

While the hearings of the proposed Commissioners (the EU Ministers) are still ongoing, the new priorities of the European Commission are already clear.

For aggregates producers this means an overarching focus on climate adaptation, alternative energy sources and raw materials strategy. The Circular Economy Package will be further implemented by boosting efforts on recycling and restricting backfilling. There will also be a new Biodiversity Strategy in which UEPG will promote the concept of temporary nature in its quarries until restoration takes place.

To better explain the many new Members of the European Parliament what they need to know about the Aggregates Industry, UEPG has produced a small brochure called the 'Policy Compass to Aggregates'. It displays all the relevant EU legislation and policy areas impacting on aggregates producers.



European Excellence - UEPG Sustainable Development Awards Ceremony 2019

For the triennial 2019 Sustainable Development Awards Ceremony, UEPG has received a record number of 53 entries from 13 countries, demonstrating the excellence of aggregates producers in Europe. A distinguished independent Jury with experts in the area of sustainable development and communication will present the selected Awards and Special Mentions. For the 2019 edition, the independent Jury is composed of:

- Ester Asin, Director at WWF European Policy Office
- Jean-Pierre Damm, Vice-Chair of the Sectorial Social Dialogue Committee of the Extractive Industry (industriAll – Trade Union)
- Anna Ostrega, Professor at AGH University of Science and Technology, Faculty of Mining and Geoengineering
- Slavko Šolar, Secretary General of EuroGeoSurveys (The Geological Surveys of Europe)
- Guy Woodford, Journalist Editor, Aggregates Business Europe/International

High-level Representatives from the European Commission, Members of the European Parliament, Members of the Council, representatives from EU Member States and other European stakeholders have also been invited. The Awards Ceremony will be followed by a Gala dinner and live music, offering an excellent opportunity to network with EU and national decision-makers, stakeholders and partners.



UEPG is very pleased to invite our friends and partners from GAIN. Please note that attendance is free of charge but advance registration is necessary, as this is a seated dinner and your place will need to be reserved.

If wishing to attend, please send us your request to participate as soon as possible to us at secretariat@uepg.eu.

European Minerals Day 2019

Every two years the European Minerals Day gives the opportunity to the European-wide public to explore the world of minerals. It is a Pan-European awareness initiative by the European minerals sector. UEPG, the European Aggregates Association, is one of the 13 partner organisation which brings together industry, geologists, Geological Surveys and trade unions in a series of open-day events across Europe.

In 2019, the events across Europe focused on the integration of minerals in the local (and broader) economies and the job opportunities the industry provides. Companies opened their doors to schools, kindergartens, neighbours, NGOs and everyone else interested in what happens in an extraction site.

It should be noted that the European Minerals Day (EMD) 2019 was not limited to events on the weekend of 20-22 September. Companies can link their local open-door days anytime during the year to the EMD website.



The Rejuvenated UEPG Team

The UEPG Secretariat has been rejuvenated, now consisting in (left to right): Dirk Fincke, Secretary-General, Alev Somer, Public Affairs Officer, Manon Bogaerts, Office Management Assistant and Sergiu Scolobiuc, Public Affairs Officer. They always stand ready to assist any enquiries from GAIN members and their contact details may be seen on <http://www.uepg.eu/contact>.



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