

VALUE. EXPERTISE. INFLUENCE.

2019 ANNUAL REPORT



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As the only trade association focusing on access for acquisition and acreage, the IAGC continues its pursuit of maintaining and expanding the G&E industry's freedom to operate around the globe. The 2019 IAGC Annual Report, "Discover: Value. Expertise. Influence." examines the work the IAGC has put in over the past year. This has enabled us to accomplish a lot and gain key victories under our new Strategic Framework: Freedom to Operate by advancing global exploration access, Industry Alignment uniting the global G&E industry leadership, Accelerate Value Creation in promoting exploration investment in producing and frontier countries, and being the Leading and Influential forum for industry thought-leaders and favored source for regulators and the news media. Our implementation under these priorities centers around the IAGC's four key strategies, which we routinely utilize and execute for issues around the world:

- intervene in legal challenges where appropriate.
- to processes and government agency decisions.

Our 50th year is just around the corner in 2021, and we look forward to our celebration and more improvements for the G&E business climate. We invite you to join us by becoming more active in the association through our committees and workgroups, connecting with us on social media, and signing up to receive association news and industry updates via our e-publications.

As we reflect on 2019 and highlight some of our most significant accomplishments, we recognize that this would not be possible without our members' support, commitment, and leadership. With your continued partnership, we look forward to continuing our work of advancing the industry in 2020.

We invite you to review our 2019 highlights in the annual report and "discover the value, expertise, and influence" of your industry trade association, the IAGC. Energy Starts Here.

PGS

2019 MARKED A PIVO AL YEAF FOR THE LAGC.

CHAIRMAN &

PRESIDENT'S MESSAGE

With the implementation of our Strategic Framework, we have experienced many victories and had many accomplishments. Even as there is optimism within the G&E industry because of increased activity and expanded access, the IAGC remains resolute in addressing business uncertainty for the industry. As we near our 50th Anniversary in 2021, there are still many more challenges before us that must be addressed to ensure the G&E industry is relevant for many more years to come.

» Legal Engagement - We build a solid administrative record to ensure defensible regulatory decisions and

» Government Engagement - We focus on regulatory bodies and key officials to ensure visibility and oversight

» Scientific Engagement - We monitor and address relevant research, advance credible science, use our in-house expertise and partner resources to propose corresponding scientifically-backed enhancements, and develop analyses and methods to address over-precaution and problematic environmental compliance issues.

ig the Dialogue - We provide factual and credible information; engage with stakeholders across various media, including editorial teams and social media; and proactively educate the media across the globe.

lagne Reiersgard IAGC Board Chairman VP Client Engagement & Special Projects

Millic. Martin

Nikki Martin President IAGC

2019 IAGC MEMBERSHIP

Governing Members



Contributing Members

ABI Holdings Ltd
Axxis Geo Solutions
Breckenridge Geophysical
Dawson Geophysical Company
DMT GmbH & Co. KG
DUG (Downunder GeoSolutions)
EDCON-PRJ, Inc.
EMGS - ElectroMagnetic GeoServices AS
ES Xplore LLC

Fugro Geofizyka Torun SA Geophysical - COSL Geophysical Pursuit, Inc. Geotec SPA GeoTomo LLC **iSEISMIC** JSC Yuzhmorgeologiya MultiClient Geophysical AS



Benchmark Geophysical Consulting Ltd. Clean Harbors Exploration Services Inc.

EPI Group US, Inc. GII - The Geophysical Institute of Israel Hurricane Geo Inspection Survey Sdn Bhd MARACQ NCS SubSea Inc. **Remote Medical International RPS** Environmental Schlumberger WTA (Malyasia) Sdn Bhd

Orica USA Inc.

PetroMarker AS

SAExploration

SeaBird Exploration Norway AS

Searcher Seismic Pty Ltd.

Sinopec International Petroluem Service Corp.

Sinopec Offshore Oilfield Services Company

IAGC members are the trailblazers of the geophysical and exploration industry, spurring exploration, creating cutting-edge technology, and providing needed energy resources to the world.

Associate Members

SEICHE Measurements Seismic Company Services - SCS Sound Oceanics LLC SWCA - Environmental Consultants UnitedHealthcare Global WGP Group Ltd Z-Terra Inc.

ABOUT THE IAGC

The IAGC is the global trade association representing all segments of the geophysical and exploration (G&E) industry. Our membership includes onshore and offshore survey operators and acquisition companies, data and processing providers, exploration and production companies, geophysical equipment and software manufacturers, industry suppliers, and service providers.

The IAGC works vigorously on behalf of its members to advance the industry's freedom to operate. Continued and increased geophysical industry and E&P industry support is critical for maintaining and enabling growing momentum on the IAGC's #1 priority, Freedom to Operate, ensuring increased access for acquisition and acreage. As one tenet of our Strategic Framework, our goal is to "Accelerate Value Creation" by increasing efficiencies in our members' operations and reducing cycle times for the industry by ensuring clear, consistent, and transparent permitting processes.

The IAGC engages governments and stakeholders worldwide on issues central to geophysical operations and exploration access. The IAGC supports and fosters science- and risk-based regulations consistent with existing practices that are proven to be effective, environmentally responsible, and operationally feasible.

The IAGC engages governments and stakeholders worldwide on issues central to geophysical operations and exploration access.

IAGC optimizes the business and regulatory climate and enhances public understanding to support a strong, viable geophysical industry essential to discovering and delivering the world's energy resources.

IAGC Vision

IAGC's vision is to be the most credible and effective voice for promoting and ensuring a safe, environmentally responsible, and competitive geophysical and exploration industry.

Our Work

The IAGC engages governments and stakeholders worldwide on issues central to geophysical operations and exploration access, including prioritizing timely, accessible data acquisition throughout the life of the asset; providing predictability and competition; promoting regulatory and fiscal certainty; promulgating risk- and science-based regulations; and prolonging the life of the asset

Supported by an experienced and professional staff, the association promotes the long-term viability of the geophysical and exploration industry by:

- both protect the environment and develop essential energy supplies.

- innovation, and operations.
- advocacy materials.
- protection, safety, and efficiency.

» Engaging government and regulatory entities with credible scientific, technical, and legal analysis to

» Establishing strong cooperative relationships with all relevant international and national trade associations and organizations to create alignment and enhance industry unity and effectiveness in advocacy.

» Educating members on regulatory initiatives and policies affecting the geophysical industry.

» Organizing consistent industry positions on emerging policy and regulatory issues.

» Facilitating continuous improvement and promotion of HSSE, social responsibility, technological

» Equipping members with scientific information, regulatory compliance resources, and public

» Recommending best practices, statements of principles, and model contracts to promote environmental



STRATEGIC FRAMEWORK for a Healthy Exploration Industry

1.10

In 2019, the IAGC implemented its Strategic Framework, which is the association's roadmap to continued success in promoting and expanding a healthy competitive geophysical and exploration (G&E) industry. The Strategic Framework supports our mission, vision, and goals. The goal is to increase the IAGC's effectiveness and significance in accelerating exploration access around the world and supporting a healthy G&E industry.

The world's growing energy demand cannot and will not be met without the G&E industry, placing our industry and association in an excellent position to adapt to meet the challenges with success.

Recognizing our strengths, our focus is to provide our members with association operational excellence that aligns with our Board-set priorities and delivers high-quality products and services, which translates into value creation for our membership.

Freedom TO OPERATE

Advance Global Exploration Access

Ensure increased access for acquisition & acreage.

- » Global Presence
- » Global Engagement
- » Global Strategy
- » Global Impact

INDUSTRY ALIGNMENT

Unite the Global Leadership of the Exploration Industry

Increase operator input and participation in the organization.

- » Alignment in support
- » Alignment in messaging
- » Alignment for access

There is no exploration without the geophysical industry, and no geophysical industry without the exploration industry. Our partnership is essential.

CCELERATE LUE CREATION

Promote Exploration Investment in **Producing Countries & New Frontiers**

Advance legislative frameworks & public engagement to attract and advance exploration.

- » Prioritize timely accessible geophysical data throughout life of the asset
- » Provide regulatory & fiscal certainty
- » Promote predictability, transparency & competition
- » Promulgate risk- and science-based regulations

LEADING NFLUENTIAL

The Forum for Industry Thought Leaders and Favored Source for Regulators and Media

Leading source for industry, media, and governments globally on exploration access issues.

- » Standard-bearer for the industry
- » Partner with global advocacy groups
- » Increase effective partnerships with governments





ACCELERATE VALUE CREATION





2 new Industry Partners added in 2019. At least one new Industry Partner has joined the IAGC each quarter since 2017.

- **G&E** industry
- » New Chairman & Board leadership elected
 - Evolving priorities and strategies

» New expertise added to the organization

- Marthea Davis: Director of Strategic Communications
- Graham Bateman: IT Manager
- Michelle Roffe: Africa Consultant (part-time)
- Ross Compton: EAME Consultant
- Simon Molyneux: Asia Pacific Consultant (part-time)
- Mabel Ornelas: Office Administrator

ssociation Sustainability

- » Implementation of Association's Committee Structure a Success efficient and effective issues management approach.
 - increased tremendously.
- » Two new Industry Partners added in 2019: Kosmos and Repsol

INDUSTRY AND ASSOCIATION SUSTAINABILITY

As the G&E industry's trade association, one of the IAGC's roles is to help define and drive industry sustainability efforts. As that sustainability driving force, the IAGC addresses issues of fair competition, best practices industry standards, policy and legislative issues, systemic risks and opportunities, and sustainable business practices that improve effectiveness and efficiencies. Finally, we drive the conversation about our industry to the general public, governments, and other key stakeholders.

The IAGC focuses on the efficient use of the resources that our members invest in the association. These resources allow us to improve association efficiencies, develop and implement strategies, and conduct activities that create long-term value. Antitrust Policy & Guidelines Workshop to reinforce Association's position on fair and open competition among contractors, vendors, and customers to ensure a robust and sustainable

• Magne Reiersgard elected Chairman for the second time in the IAGC's history

2019 was a landmark year for the IAGC and its organizational structure of our committees and workgroups. This reorganization enabled the IAGC to be more aligned internally with the Board of Directors. In addition, we created focused, solutions-oriented remits and initiatives for all committees. This restructure also allowed us to become a more nimble and responsive organization with a more

 The committees and workgroups under the restructure held their first meetings during the IAGC Annual Conference. Since the first meeting, participation in IAGC committees and workgroups has

» New Governing Members added in 2019: Magseis Fairfield and Seabed Geosolutions



DISCOVER VALUE.

At the heart of the IAGC's value proposition for our membership is the association's ability to address those issues that are most important to the industry, meet our members' needs in a timely manner while preserving the association's credibility, and reliability and remain focused on our niche area of fighting to maintain and expand our members' freedom to operate around the world. When it comes to our members, the IAGC seeks to be the G&E industry's MVP, "Most Valuable Player," delivering on our Member Value Proposition.

Advancing & Defending the Industry's Freedom to Operate

The IAGC's work around the world to defend and advance the G&E industry's freedom to operate is becoming increasingly more important as the activists and anti-oil & gas agenda continues to erode that freedom.

Fight to Block the Oil Exploration Ban in Ireland

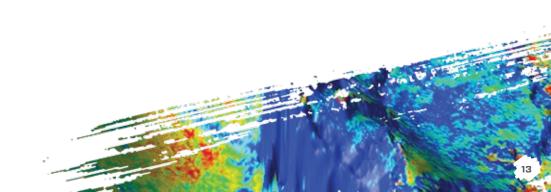
Following a sudden announcement of ending oil exploration in the country during the United Nations Climate Summit in the U.S. in September 2019 by Ireland's Taoiseach, the IAGC immediately leaped into action to engage the government. The IAGC worked with the Irish Offshore Operators Association (IOOA) to develop a strategy and begin engagement with the government to ensure there was an opportunity to put forward the G&E industry's questions and concerns regarding the granting of new licenses to acquire multi-client survey data by those companies that have made substantial investments into the country. If enacted, those investments would be severely, if not totally devalued. To date, IAGC members have invested approximately US\$100 million since 2015.

This latest move by the Irish government comes as the IAGC along with IOOA and other industry partners were successful in beating back the exploration ban legislation earlier in the year.

Government & Regulatory Engagement

In response to our mandate of advancing the G&E industry's global freedom to operate, the IAGC continues to expand our focus on government and regulatory affairs efforts, reaching more countries at higher levels than ever before and across a broader span of policy issues. More than ever, the IAGC is covering the globe, engaging governments by means of meetings and conferences, comments and letters, and offering feedback and industry input into various regulatory approaches that impact the G&E industry.

We are everywhere our members are and have increased our on-the-ground resources to ensure we have visibility in priority areas. In 2019, we added a full-time consultant to support the EAME region, and another consultant focused on the African continent. We now have representation in Australia to conduct in-country advocacy and further our government engagement efforts in the Asia-Pacific region. These additional resources enabled us to continue our proactive strategy while also working to reduce barriers to investment.





IAGC Presents at IOPER Annual General Meeting

The IAGC Vice President of Regulatory and Governmental Affairs, Dustin Van Liew, presented at the International Offshore Petroleum Environmental Regulators (IOPER) Annual General Meeting in Washington, D.C. As a guest speaker, Dustin provided insights on environmental issues and misinformation consuming the current regulatory space. During the industry engagement session, hosted at the U.S. Department of the Interior, Dustin presented to nearly 20 environmental regulators and G&E industry professionals, sharing information about the IAGC and our regulatory efforts as well as fact-based findings on marine seismic operations and the potential impact of sound on the marine environment. Participation in this invitation-only session is part of the IAGC's efforts to advance regulator engagement and keep industry permitting and compliance agencies abreast of scientific and operational developments in the G&E industry. Our engagement also strives to prevent the proliferation of non-scientific and non-risk-based government regulations and policies.

IOPER is a collaborative group of national regulators from around the world with members who focus on environmental performance standards within the offshore petroleum exploration and production industry, which includes standards applicable to the industry's normal operations as well as environmental emergency prevention, preparedness, and response. Many members of the IOPER also have an association with the International Regulators' Forum for Global Offshore Safety.

IAGC Takes Part in D.C. Roundtable for IBAMA President Eduardo Bim

The IAGC President and Vice President of Government and Regulatory Engagement took part in an invitation-only Roundtable for IBAMA President Eduardo Bim in Washington, D.C. The Roundtable, hosted by Beveridge & Diamond, included the IAGC as well as other business sectors. The meeting focused on the regulatory trends under the new administration in Brazil and whether there are future opportunities for improvement in the current environmental permitting system. The IAGC staff stressed the importance of the G&E industry in ensuring the new Administration's focus on energy policies that enable its long-term success.



25 U.S. Capitol Hill Visits and Meetings

Direct engagement with **122 countries** in 2019

250+ Pages of Comments:

- » Argentina:
 - Comment letter and detailed table on proposed seismic regulations.
- » Australia:
 - Letter to Department of Industry, Innovation and Science about the review of the Petroleum Data Management Regulations (DMR).
 - Draft IAGC Fisheries Position NERA Compensation.
- » European Union:
 - Official response on Impulsive Noise to UK's Marine Strategy Consultation as part of the EU Marine Strategy Framework Directive (MSFD).
- » Greece:
 - IAGC counter to WWF Declaration calling for a ban of oil and gas drilling operations in the Hellenic Trench.
- » Lebanon:
 - Comment on the Draft Strategic Environmental Assessment for the Exploration and Production Activities Offshore Lebanon.
- » New Zealand:
 - on the Hector's and Māui Dolphin Threat Management Plan (TMP) Review Letter.
 - that it will end oil and gas exploration.
- » Scotland:
 - Scottish Marine Protected Areas Comments.
- » United Kingdom:
 - Disclosure of Geophysical Data.
 - (created or acquired under an exploration licence pre-2018) Comments.
 - UK Stakeholder Forum on Underwater Noise IAGC Comment Letter.
- » United States:
 - Activities NOAA.
 - Process, Advance Notice of Proposed Rulemaking NOAA.





• Department of Conservation (DOC), regarding DOC and Fisheries New Zealand Consultation Letter to Minister Ardern, New Zealand, regarding New Zealand Government's announcement

Letters to the Oil & Gas Authority (OGA) concerning the Consultation on the Regulatory

OGA proposed [supplemental] guidance on the disclosure of certain geophysical survey data

• Comments on Proposed Rule for Takes of Marine Mammals Incidental to Specified

Comments on Procedural Changes to the Coastal Zone Management Act Federal Consistency

Argentina

IAGC's Argentina Permitting "Roadmap" Supports Member Companies

The IAGC's government engagement with countries provides opportunity for meaningful exchange of information and greater efficiencies in process for both member companies and the governments with whom they work. An excellent example of the benefits of engagement is the IAGC permitting "Regulatory Roadmap" for Argentina. The roadmap is a result of the Argentine government reaching out to the IAGC, and it provides clarity on the permitting process in Argentina and helps to reduce uncertainty for IAGC members.

In addition, the IAGC held a Regulators Workshop for 15 regulators supported by IAGC staff and 20 IAGC members as well as a meeting with Argentina's Ministry of Energy and Mining (MINEM). Those meetings provided industry operations details, industry standard mitigation measures, and information on the best available science around potential marine environment impacts.

Australia:

IAGC's Victory in Australia Saves Members Millions

After two years of extensive engagement with the Australian Tax Office (ATO), the IAGC earned a big win in Australia for multi-client seismic operations. The government announced its decision on 18 September. The IAGC had worked closely with all levels of government in Australia to ensure that an accurate accounting of the multi-client business model was recognized by the ATO and to secure the ATO's concession that the seismic surveying industry does conduct an exploration business.

Following the last few years of consultation between the ATO and the IAGC, the government, through a ruling, adopted the view that an immediate deduction for the cost of seismic data may be available under subsection 40 80(1), where the first use of the information is analyzing it to inform further exploration. This also represented a significant shift in the technical position from the original draft ruling issued on 20 December 2017. This ruling provides an estimated industry-wide cost savings of at least USD \$100M, which includes tax and penalty payments that would have become payable on amendment of company tax returns.

Brazil

IAGC's Environmental Database and Sensitivity Matrix Going to the Next Level

Following the release of the IAGC-created The Joint Industry, Academia & Government Environmental Database and environmental sensitivity matrix, discussions got underway for the enhancement and expansion of the environmental database which would be available to a multiplicity of industries within Brazil. The idea of the database and matrix is to streamline and enhance industry permitting requirements in Brazil and enable IBAMA to find all official environmental information for the country in one single portal. This gain in efficiencies is projected to reduce the permitting timeframe.

Greece

The IAGC's support of the Greek government's pursuit of energy self-sufficiency resulted in defeating environmental NGO campaigns. The IAGC filed a letter in support of activities in the region to work toward a successful outcome for Greece's goal and to advance frameworks that attract and maintain investment.

United Kingdom

The IAGC, with the leadership of the EAME Committee, submitted letters on the mulit-client business model and data confidentiality to the UK OGA and six key Parliament members. The group also held a meeting with Henry Smith and members of Parliament to discuss the industry's position on the two issues.

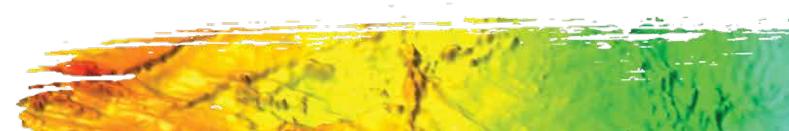
United States

- the U.S. Atlantic OCS, but continues the fight for freedom to operate as an intervenor in ongoing litigation.
- Approvals Act of 2019 (SEA Act) introduced by Congressman Mike Johnson (LA-04). In our statement of support, the IAGC encouraged the U.S. House of Representatives to support this legislation which existing protections for marine mammals. We also commended Congressman Johnson for his efforts to accomplish what any reasonable person would expect of a federal regulatory program: transparent standards, firm timelines, an efficient process, and the elimination of redundancy.
- understand seismic operations in the event surveys are permitted in the Atlantic OCS.

IAGC Prepares E&P Industry for U.S. GOM Regulatory Changes

The IAGC and its trade association partner, API, co-hosted a workshop with NMFS (NOAA Fisheries), the Bureau of Ocean Energy Management, the Offshore Operators Committee (OOC), and representatives from energy and petroleum companies to discuss upcoming changes in the GOM, following the expiration of the existing settlement agreement in early November 2018. The workshop included overviews from the IAGC's Americas Committee Chair, energy and petroleum companies, and regulatory agencies regarding their activities and discussion of potential efficiencies in the permitting process.

Hosting this meeting is part of the IAGC's strategy of educating members on regulatory initiatives and policies affecting the geophysical and exploration industry, organizing consistent industry positions on emerging policy and regulatory issues, and facilitating continuous improvement and promotion of HSSE, social responsibility, technological innovation, and operations.





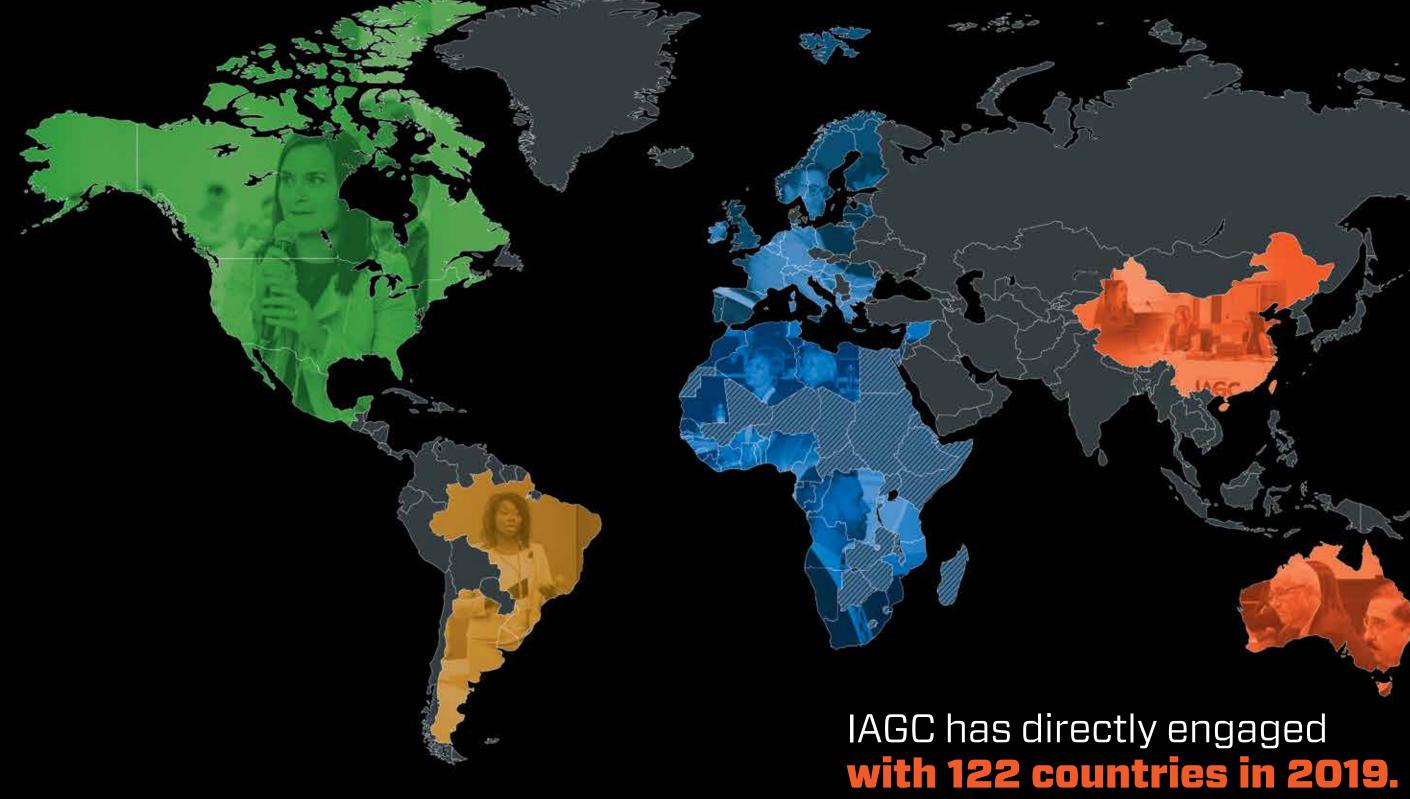
» The IAGC was successful in getting National Marine Fisheries Service authorizations for seismic surveys in

» The IAGC continues to press Congress for modernization of the Marine Mammal Protection Act (MMPA) by enacting common sense modifications. We were instrumental in having the Streamlining Environmental modernizes the law to bring more efficiencies and certainty to the permitting process while maintaining

» The IAGC presented for the third consecutive year at the North Carolina Fisheries Association meeting. A result of outreach in 2014 in North Carolina, the IAGC has used this annual conference of North Carolina fisheries organizations and regulators to work collaboratively and proactively to help them to better



ACC: Everywhere Our Members Are



Treaty Organizations Engagement

The IAGC's work with treaty organizations not only expands our reach but also enables us to provide critical scientific and regulatory input with multiple nations and leaders on regulations and policies that can negatively impact the G&E industry. These organizations often provide us a streamlined and effective means of engaging and communicating with multiple nations at once at the highest levels. These organizations are also key because the participants are subject to international law and have binding enforceable agreements among themselves or with states. Because treaty organizations have begun to play a very significant role in influencing individual nation political systems and in global governance, the IAGC has pursued forming its own formal relationships with key treaty organizations that address G&E industry issues.



Abidjan Convention

- » The IAGC obtained Technical Expert Partner status with the organization.
- » The IAGC participated in the invitation-only Abidjan Convention in July. Our continued participation in this and other treaty organizations is essential to ensure the promulgation of science- and risk-based regulations and prevention of misinformation of the anti-oil & gas development agenda.



Mediterranean Action Plan

Barcelona Convention

Barcelona Convention

- The IAGC provided comments at the Barcelona Convention meeting to push back against the use of ACCOBAMS guidelines on the basis they were not practical. We also recommended that the Convention consider instead, JNCC guidelines which are more pragmatic, tested, and proven to be a well-utilized framework. Because of our work, it appears likely that the Convention will review ACCOBAMS guidelines in the near future.
- » The IAGC obtained MAP Partner status.



Nairobi Convention

» The IAGC obtained MAP Partner status.

IAGC Granted Observer Status with OSPAR

One of the greatest accomplishments of 2019 regarding the IAGC's standing with treaty organizations is our being granted Observer Status in the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR). Having this status means that the IAGC can engage OSPAR directly and more closely monitor any developments that may impact the G&E industry.

OSPAR is the mechanism by which 15 governments and the EU cooperate to protect the marine environment of the North-East Atlantic. The OSPAR Convention has an Offshore Industry Committee where it conducts assessments and makes decisions, recommendations, and agreements that impact the oil and gas industry. Other committees that engage on issues around the oil and gas industry are the Biodiversity Committee and the Environmental Impact of Human Activities Committee.



Observers from observer organizations may attend OSPAR Commission, main committees, and working group meetings. Organizations must apply to be an observer and granted the status by OSPAR.





United Nations (UN)

- The IAGC provided input at the UN Technical Group on Underwater Noise Workshop. The IAGC's focus during the workshop was to provide input and influence on the UN's consideration of the use of non-scientific restrictions on the G&E industry.
- » Seeking observer status.



The IAGC seeks to be the G&E industry's MVP, "Most Valuable Player," delivering on our Member Value Proposition.

DISCOVER EXPERTISE.

The IAGC prioritizes producing high-quality, meaningful products that support our members' activities. We do this across a spectrum of fields, from science to seismic operations and the business and regulatory spheres. The work of the IAGC is helping to reshape the G&E industry.

Advancing Credible Science

The IAGC is known for its relentless pursuit of the use of credible science and association credibility. Our scientific experts are committed to that standard of truth, fairness, and objectivity, meaning they hold themselves and others to staying within their data and interpreting those data properly. Our scientific experts conduct presentations and attend key scientific conferences around the world. The IAGC has built a reputation for being a credible and reliable source of information, and a great deal of that is because of our experts.

- advancing credible science to promulgate science-based regulations.
- attending a planning meeting in Perth in September 2019.

The IAGC Presents on the Interaction of Seismic Sound and Marine Mammals at Major Global Conferences

Dr. Loureiro presented "Behavioral effects of sound from marine geophysical surveys on marine mammals: A literature review" at the World Marine Mammal Science Conference. Her presentation provided an overview of the body of science available regarding the interaction of seismic survey sound and its behavioral impacts on marine mammals.

The meeting brought together leading marine mammal scientists, managers, and policy makers from more than 60 countries and from every continent who engaged in dialogue on the world's most pressing marine science and conservation issues as they relate to these species. For the 2019 conference, the Society for Marine Mammalogy joined with the European Cetacean Society (ECS) as co-hosts.

The IAGC's scientists compiled high-quality literature reviews for member use when engaging with world regulators and the scientific community to promote and advance credible science to support science-based regulations:

- » Marine Mammal literature review
- » Effects of Sound on Fish/Invertebrates/Plankton
- » Update of the IAGC 2015 annotated bibliography
- » Completed a compilation of a literature library with more than 200 references

Presentations and Attendance

- regulators, and other stakeholders.
- with industry regulators on key IAGC positions.
- from Exposure to a Seismic Source in Perth.
- to improve technical capacity.

» Under the leadership of Dr. Alex Loureiro, the IAGC commissioned a lobster study review by an independent crustacean expert to better evaluate the experimental design, results, and authors' interpretation of a recently published paper by R.D. Day et al, entitled "Seismic air guns damage rock lobster mechanosensory organs and impair righting reflex," which garnered heavy media attention. This is another example of how the IAGC defends our members' freedom to operate by

» Dr. Gisiner assisted in the planning and execution of new research in Australia, sponsored by Santos, on effects of seismic sound on zooplankton which is planned for 2020. Dr. Loureiro has since continued advisory support,

» Presented on marine surveys and the tenets of underwater acoustics as part of the Discovery of Sound in the Sea's (DOSITS) webinar series on seismic sources. The webinar was held for the scientific community,

» Presented at the 2019 Effects of Noise on Aquatic Life Conference (Aquatic Noise 2019) in the Netherlands and met

» Attended the Canada Department of Fisheries and Oceans Science Advisory Screening in Nova Scotia.

» Attended Australian Institute of Marine Science (AIMS) workshop on planned project Impacts on marine Plankton

» Attended AWEA Offshore WINDPOWER conference in Boston where some of IAGC's work was presented. » Phil Fontana (Polarcus) presented the Alternative Level A Takes Spreadsheet User Tool to NOAA Fisheries staff



Promoting Industry Alignment

The IAGC works around the clock to encourage G&E industry alignment and promote value creation. Our efforts are strategic and executed in lock-step around the world to deliver maximum impact to help advance the industry.

Member Town Halls

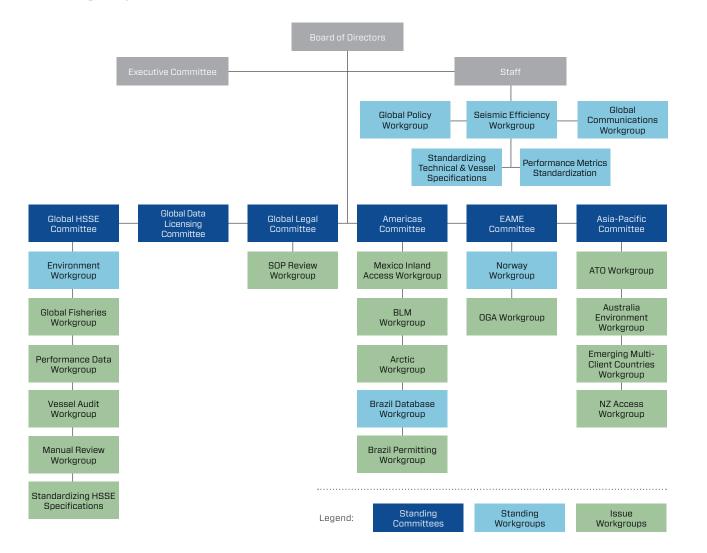
The IAGC conducts Member Town Halls twice a year to share important information about the business and regulatory climate around the world, keep members abreast of how the association is working on their behalf, and to answer member questions. The Town Halls also enable the association to ensure that the members understand the priorities and strategies of the organization.

Nearly 100 people attended the 2019 IAGC HSSE Forum, hearing more than 20 speakers.

Committee and Workgroup Outputs and Successes

The IAGC 2019 Committee and Workgroup Organization

The new committee and workgroup restructure has proven to be an effective strategy in efficiently addressing key issues around the globe by the association and its members.



- » The Seismic Efficiency Workgroup was developed by the IAGC Board of Directors to pursue to proceed in 2020:
- Standardizing Technical and Vessel Specifications
 - Standardizing HSSE Specifications
 - Performance Metric Standardization
- » The Performance Data Workgroup produced the 2019 Annual HSSE Statistics Report which provides statistics and key performance indicators across priority health, safety, security, and environment areas.
- » The HSSE Committee revised and published an updated edition of the IAGC Support Vessel Guidelines & Inspection Report.

HSSE Committee's Vessel Audit Workgroup Produces IAGC Marine **Geophysical & Geotechnical Risk-based Auditing Guidance Document**

A key success with the IAGC's committee restructure is the production of a much-needed guidance tool for our membership. The IAGC Marine Geophysical & Geotechnical Risk-Based Auditing Guidance Document focuses on improving industry efficiencies. A joint work of the IAGC's Governing Members and Industry Partners, the endeavor represented 17 companies.

This document provides recommended guidelines for auditing and inspection processes for contractors, subcontractors, and clients in marine geophysical and geotechnical survey operations. The overall objective is to improve the standard of audits and auditor competency and create a collaborative environment where contractors, subcontractors, and clients can work together to improve the efficiency and effectiveness of the audit process.

The guidance addresses reducing the incidence of excessive auditing, improving the efficiency of auditing and inspection processes, creating consistency across marine geophysical and geotechnical operations, improving acceptability of audits and inspections across company boundaries, and verifying that operating systems in place optimize the well-being of all personnel, clients, contractors, sub-contractors, communities, and the environment.

IAGC Hosts Most Successful HSSE Forum Ever

The IAGC hosted its 2019 HSSE Forum on 15-16 October at the PGS Global Headquarters in Houston. More than 20 speakers, including our own IAGC staff members and experts, engaged with a lively room of nearly 100 executives and operators on the most current issues, actual company practices, and recommendations to improve current industry-wide challenges. The event — the highest attended in forum history — focused on a variety of substantive and timely HSSE topics, including regulatory updates, the IAGC Ghost Net & Marine Debris Removal Initiative (GNI), remote medical system risk assessments, onshore helicopter best practices, drone use, digital impact on offshore exploration, standardizing HSSE specifications, and the marijuana revolution and drug testing.





specific counsel-approved initiatives, best practices, and standards—promoting environmental protection, safety, and efficiency. From this workgroup, three (3) initiatives have been approved

BISCOVER INFLUENCE.

As part of the IAGC's efforts to remain the leading source on exploration access issues for the G&E industry, we share our regulatory, government, and scientific expertise with varied audiences, including IAGC members, the media, the scientific community, governments, and other stakeholders by producing high-quality content such as fact sheets, position papers, and regulatory and permitting tools.

We promote the visibility of the G&E industry

by highlighting the work we do and its importance to the communities and economies of the world. We also educate and inform stakeholders, including the media. We are not only reactive but more proactive in promoting our message, especially in the media where we conduct ongoing outreach and sometimes have to hold the news media accountable by correcting the record.

Leading and Influential: Shaping the Dialogue

IAGC's OTC Panel Brings Greater Attention to the G&E Industry

The value of access and exploration was reiterated during the 2019 OTC, which, for the first time in the mega-meeting's history, featured a panel solely-focused on the seismic industry, hosted by the IAGC. Moderated by IAGC President Nikki Martin, the session featured an exclusive panel of leading CEOs who are also IAGC member companies representing all segments of upstream and the geophysical space, including CGG CEO Sophie Zurquiyah, PGS President & CEO Rune Olav Pedersen, Polarcus CEO Duncan Eley, TGS SVP of New Ventures Erik Finnstrom, and WesternGeco President Maurice Nessim. The executives provided updates on the current state of the industry as well as forecasts and CEO sentiment on how the industry has masterfully integrated technology.

The panel drew a large attendance to hear about the unique position of the G&E industry in ensuring that the overall oil and gas industry is healthy for decades to come. Chevron's Vice President of Global Exploration, Liz Schwarze, summed up the importance of the G&E industry in an earlier session in fewer than 10 words: "Good exploration is all about rocks and access."

Resources and Tools

The G&E industry has a wonderful story to tell about its role in ensuring the safe and efficient discovery and delivery of the world's energy resources. With this in mind, the IAGC believes strongly and acts to take the lead in shaping the dialogue about the industry. We engage with governments, the scientific community, the media, and other industry trade organizations to do just that.

The IAGC produced several useful tools for its membership and stakeholders in 2019:

- » Seismic Survey Activities in the Arctic: Arctic National Wildlife Refuge (ANWR) Fact Sheet
- » "Putting Marine Seismic Surveys into Context" animation

Media Education and Outreach

It has always been the job of the news media to report the facts and provide observations on the current state of affairs, including current events, government, and companies or people that influence everyday life. As part of the IAGC's efforts to remain the leading source on exploration access issues for the G&E industry, we always share information with the press, and in addition to proactive outreach, sometimes have to hold the news media accountable when they get it wrong.

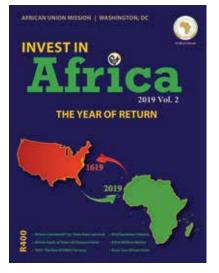


IAGC's Board Chairman Magne Reiersgard's featured opinion piece in the June issue of Offshore News & Technology Magazine

IAGC's Work in Africa Featured in Interview with Nikki Martin

Invest in Africa Magazine published a Q&A with IAGC's President Nikki Martin. The article focused on the IAGC's efforts to increase engagement in Africa, work with individual African nations that are seeking to attract new investment in their countries and those who are maintaining exploration and development investments. The article also discussed elements of successful frameworks that encourage investment.

The article focused on the IAGC's efforts to **increase engagement** in Africa.



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of the Energy Industry:	ENERGY STARTS HERE*
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Media Presence



3 Opinion-Editorial pieces 9 Correcting the Record Media Outreach

For the G&E Industry, we see three keys to mutual success for Africa's oil and gas industry: transparency, predictability, and clarity. Business certainty is critical no matter where you operate in the world, and for African countries to successfully meet their own goals, now is the optimum time to develop practical policy frameworks to ensure Africa's place in the world as the most attractive investment for resources.

— Nikki Martin (Invest in Africa Magazine, June 2019)

Gail Adams, spokeswoman for the International Association of Geophysical Contractors, said, "Just as there are Americans who support limiting natural gas and oil development, there are also many Americans who are not willing to pay increased energy costs that will result from this myopic view."

"The more data that our government has to make informed decision, the better off our country is in terms of our energy future," she said.

— Gail Adams (Reuters, April 29, 2019)

"The International Association of Geophysical Contractors has countered claims about harm to marine mammals by stating that, 'More than five decades of extensive worldwide seismic survey activities and scientific research indicate that the risk of direct physical injury from sound to marine mammals is extremely low.'"



— (Washington Post, October 25, 2019)

— (Offshore News & Technology, January 2019)



Social Media Presence



316 TWEETS

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- Top Tweets

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Content has been seen has reached has reached 2195



75.3K LinkedIn members reached

Engagement with LinkedIn users is UP 302.2%









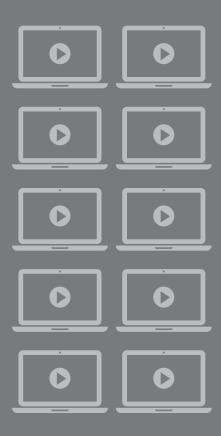
Most Viewed Video

ched ers is Content has been viewed **145.5K** times this year



263 POSTS <<< Best LinkedIn Posts





Partnerships and Initiatives

Strategic partnerships and initiatives are fundamental to improving outcomes for the IAGC and the G&E industry. Collaboration enables the association to leverage its resources for maximum benefit and coverage, expand and improve industry alignment, and grow our support base.

The IAGC held the first Global Trades Meeting during the 2019 Annual Conference, providing a platform for E&P trades globally to discuss exploration access issues.

- » American Petroleum Institute (API) and the Offshore Operators Committee (OOC): Partnerships for the IAGC are working to prepare industry and agencies for the new regulatory framework governing exploration activities in the U.S. Gulf of Mexico. The IAGC and API are also defending the industry's freedom to operate in the Atlantic Outer Continental Shelf (OCS) as legal intervenors in current litigation efforts to overturn the National Marine Fisheries Service's (NMFS) decisions to authorize surveys.
- » APPEA: The IAGC is working alongside Australia's oil & gas trade association to respond to the recently announced seismic inquiry.
- » Oil Gas Denmark: The IAGC is working with Oil Gas Denmark to oppose efforts to halt exploration leases in the country.

The year saw an increased focus on the IAGC's premier initiative, the Ghost Net & Marine Debris Removal Initiative (GNI) which is resulting in increased participation by member companies.







Stakeholder Engagement

IAGC participates in many diverse conferences and workshops around the globe to raise the visibility of the G&E industry as well as the visibility of the association to support our strategic framework and to achieve our mission and vision. A few of those events are highlighted:

» IAGC Presents at Ireland's Petroleum Infrastructure Programme and research results.

The PIP was set up in 1997 by the Petroleum Affairs Division (PAD) of Ireland's Department of Communications, Climate Action & Environment, The overall aim of the PIP is to promote hydrocarbon exploration and development activities by strengthening local support structures, funding research data gathering and 'land-based' research in Irish offshore areas, and providing a forum for cooperation amongst explorationists and researchers.

» IAGC Provides Insight into Underwater Acoustics in Presentation in Scotland propagation modeling for marine seismic surveys for that country's regulators. Fontana's presentation focused on the various nuances of underwater sound wave propagation and this presentation.

The session was created to help regulators better understand how sound behaves in the marine environment and encourages them to use data that most resembles what happens in real-life seismic surveying conditions. These efforts aim to apply more realistic estimates of seismic operations when governments are modeling potential impacts to marine life.

- » IAGC Takes Part in 2019 Africa Oil Week Conference IAGC Africa Consultant Michelle Roffe served as the moderator of the Angola Prospect Forum at Africa Oil Week (AOW). The Prospect Forum is AOW's venue for new business opportunities and oil and gas sector with 1500 global industry representatives attending from around the world.
- » IAGC Presents at Africa Oil & Power 2019 IAGC EAME Consultant Dr. Ross Compton presented on the G&E Industry and attracting and maintaining exploration investment in Africa at Africa Oil & Power. This conference is Africa's senior-level government officials, and top executives of private sector companies spanning the energy value chain. This is the first year the IAGC has participated in the Africa Oil & Power conference. The IAGC has a strong partnership with AOP, and President Nikki Martin is featured in AOP's 2019 Angola publication.



IAGC's EAME Consultant, Dr. Ross Compton, presented on behalf of the IAGC at the 11th Petroleum Infrastructure Programme (PIP) Conference in Dublin, Ireland. Ross' presentation focused on informing industry regulators and the research community on the latest exploration opportunities

Representing the IAGC, Phil Fontana (Polarcus, Chief Geophysicist), conducted a session at the Joint Nature Conservation Committee (JNCC) in Scotland regarding sound propagation and provided an illustration. Regulators at IBAMA in Brazil and NOAA Fisheries in the U.S. attended

where National and Independent Oil Companies present their prospects and farm out joint venture opportunities to the industry. More than 1500 delegats attended the conference for the upstream

leading platform for energy investment and policy, bringing together an elite class of ministers,





IAGC Vice President of Communications & External Affairs Gail Adams presented at the Pennsylvania-Ohio-West Virginia Regional Alliance conference, sponsored by Orion Strategies. Adams' presentation, entitled "Connecting the Dots: Communicating Effectively to Advance Our Industry," to communications, corporate social responsibility and government relations professionals in the region focused on information about the IAGC's work and resources, the value of the G&E industry, and the need for practical alignment in strategy and messaging across the breadth and depth of the oil and gas industry as a whole

Fifty attendees across the three states also heard other presentations including Nelson Government Strategies, API-New York, Chevron, Shale Crescent USA, NOVA Chemicals, and Orion Strategies.

» IAGC Attends GEBCO/Nippon Foundation's Seabed 2030 Conference in London IAGC Vice President of Communications & External Affairs Gail Adams attended the GEBCO-Nippon Seabed 2030 Project Meeting. The Nippon Foundation and GEBCO aim to inspire the complete mapping of the world's oceans by the year 2030. They have invited the IAGC to work with them and member companies by adopting the project to accomplish this worthy goal

The IAGC is the leader in strategic stakeholder engagement with a solid reputation of providing government and regulatory entities and other trade associations with credible scientific, technical, and legal information; regulatory compliance resources; and public advocacy materials.

IAGC 2019 Budget

Contributing/Associate Members: \$257,250

Industry Partners: \$335,000



Governing Membership: \$2,237,351

79%

We value the confidence our members place in us and the support they provide. The IAGC is committed to being responsible stewards of the association's resources provided by our members.

TOTAL: \$2,829,601



9%



Meet the IAGC Staff



Nikki Martin President



Gail Adams VP of Communications & External Affairs



Dustin Van Liew VP of Regulatory & Governmental Affairs



Alex Loureiro, Ph.D. Director of Marine Environment & Biology



Criss Rennie White Director of Membership & Administration



Jameson White Director of Member & Industry Relations



Marthea Davis Director of Strategic Communications



Krystal Coker Executive & Member Support



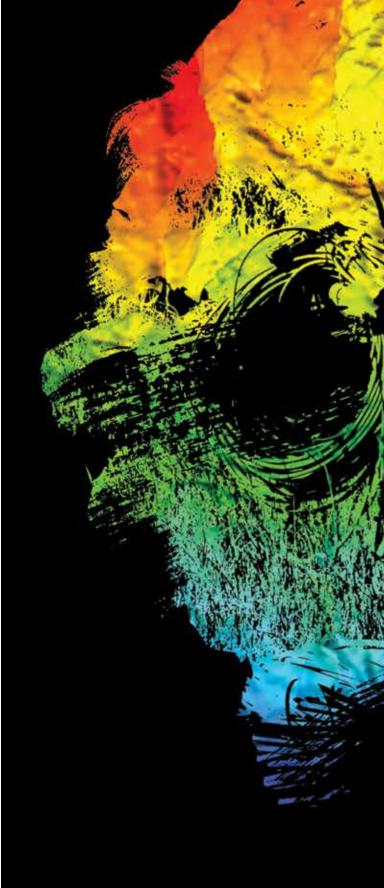
Mabel Ornelas Office Administrator



Graham S. Bateman IT Manager

Consultants:

Andreia Leao-Owens - Latin America Ross Compton, Ph.D. - EAME Michelle Roffe - Africa Simon Molyneux - Asia Pacific







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