

Innovate the Sustainable Future

2023-2024 Annual Report

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In 2023, we hit the sad record of the hottest year by a considerable margin, raising concerns over how much warmer and more dangerous today's climate has become compared to pre-industrial levels.

At the GFCC, sustainability gained a spotlight, with multiple discussions highlighting the importance of accelerating innovation to advance the 2030 Agenda and meet sustainable development goals.

We know the time to reduce fossil fuel burning and preserve livable conditions is shrinking. Innovation is necessary to develop new business models, technologies, products, and services that can simultaneously help reverse climate change and drive economic development.

In November, we gathered at Gallup's headquarters in London for the 2023 Annual Meeting and Global Innovation Summit (GIS). Under the theme **Shape Tomorrow: Innovate the Sustainable Future**, we hosted a series of leadership discussions focused on the steps to advance innovation and sustainability at the local and global levels.

Our goal throughout the year was to harness the power of our outstanding community of leaders worldwide to advance the critical role of innovation in reducing emissions, building climate resilience, and enabling climate mitigation and adaptation efforts to drive future growth and new opportunities for local communities.

The <u>Call to Action—Innovate the</u>
<u>Sustainable Future</u> is proof of this commitment. Crafted after multiple brainstorming and knowledge exchange sessions with our members and fellows, the <u>Call to Action</u> reflects the expertise accumulated across our network and offers recommendations to governments, universities, industry leaders, and civil society to act and frame sustainability as an opportunity.

Overall, 2023 was one of the most active years for our community. We held numerous engagements with

our members and fellows and participated in important conferences and leadership events in Northern Ireland, Greece, Brazil, England, and the United Arab Emirates.

We played a leadership role in co-hosting an economic summit in association with Queen's University Belfast during the celebration of the 25th Anniversary of the Good Friday Agreement in Belfast in April.

Following that, we traveled to Delphi, Greece, to provide exclusive content on topics related to future growth, innovation, and competitiveness at the Delphi Economic Forum. In September, we contributed to the deployment of the 10th Industry Innovation Summit hosted by the Brazilian National Confederation of Industry (CNI) in São Paulo, Brazil. On occasion, we led a delegation of international leaders to share perspectives on eco-innovation, the summit's leading topic.

At the end of 2023, in December, we landed in Dubai, United Arab Emirates, to hold a flagship Innovation Arena at COP 28 in partnership with our founding member, the Council on Competitiveness. At COP 28, we



The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness, during the Global Innovation Summit 2023 in London, UK.

reviewed some of the most critical opportunities associated with energy transition and sustainability and mapped potential contributions from the various organizations in the room. Our arena connected leaders from the Global North and South while building a pathway for continued engagement in 2024.

In 2023, we also expanded our geographic and intellectual footprint, which now encompasses 43 members and 65 fellows across six continents and 35 nations. We welcomed four new members: Spectrum Index Ltd., Bucharest University of Academic Studies, Harper Adams University, and Aston University. We also incorporated



Mr. Charles O. Holliday Jr., Chairman , GFCC, during the Global Innovation Summit 2023 in London, UK.

four new fellows: Ms. Athina Chatzipetrou, Dr. Claudio Furtado, Prof. James Metson, and Prof. Peter Smith.

Additionally, we continued our online engagement through our exclusive Monthly Calls and Expert Sessions focused on critical issues shaping the world. We hosted high-profile guest speakers on discussions about the importance of life-long learning for sustainable development, the impact of Chat GPT on higher education, business opportunities arising from the European Green Deal, and the role of precincts in innovation, just to cite a few.

Additionally, we have conceptualized a new cycle of activities with the University and Research Leadership Forum (URLF) and started to work with members to implement it. Beginning in 2024, the URLF will focus on creating, growing, and connecting an international network of universities committed to place-making innovation, advancing public-private partnerships, and positively impacting local communities. We are proud to announce that Prof. Aleks Subic, Vice-Chancellor and Chief Executive of Aston University, will co-chair this new phase.

Finally, we are delighted that the 2024 GIS, co-hosted by Queen's University of Belfast and the Centre for Competitiveness, will occur in Belfast, Northern Ireland, between November 11 and 15. We also plan to host a series of leadership dialogues leading to the Summit.

This report invites you to learn more about our work and engage with us. I hope you enjoy the reading.

Why Leadership Matters to Build a Sustainable Future

Our global community experienced unparalleled activity in 2023. As the year unfolded, we engaged in numerous events spanning Portugal, Northern Ireland, Brazil, the United States, and the United Arab Emirates, exchanging with our members and expanding our policy impact across the globe.

In April, we embarked on a journey to Belfast, where we played a pivotal role in shaping the future vision of Northern Ireland during the 25th Anniversary of the Good Friday Agreement, hosted by our member Queen's University Belfast.

Yet in April, we found ourselves in Greece, collaborating with the Delphi Economic Forum and contributing with exclusive insights to this gathering of influential global leaders.

In September, we hosted a delegation of international leaders in Brazil to share perspectives on eco-innovation during the 10th Industry Innovation Summit hosted by the Brazilian National Confederation of Industries (CNI).

SIGNED BY



Mr. Charles O. Holliday Jr. Chairman, GFCC



The Hon. Deborah L. Wince-Smith
President, GFCC
President &
CEO, Council on
Competitiveness

In November, we held our Annual Meeting and the flagship **Global Innovation Summit** at Gallup's European headquarters in London. There, we delved deeper into the role of innovation in fostering sustainable practices and accelerating the transition towards a greener future.

We are deeply grateful to our Gallup colleagues for hosting us in their headquarters at such short notice

once we realized that our plans to travel to Qatar were doomed due to security concerns.

To close the year, we landed in Dubai to host the **GFCC-Council Innovation Arena at COP 28**, an incredible opportunity to connect multiple stakeholders in conversations about innovation and sustainability.

These experiences are a small sample of the activities that we had the pleasure of partnering with our members. They display our organization's capacity to mobilize leaders on the ground globally.

The leadership of GFCC members and fellows has been essential to advance national competitiveness in the nations represented in our network and fundamental to the advancement of our agenda throughout the years.

We invite you to read this report to learn more about the work and the achievements of the GFCC in 2023, as well as to get snapshots of the fantastic thought leadership we are able to convene.

Our leadership agenda

As a global leadership network, the GFCC serves as a primary platform for leaders to exchange ideas, co-create concepts and strategies, and advance critical agendas. In 2023, we doubled down on sustainability and further highlighted the nexus that connects it to innovation, competitiveness, and prosperity.

Our agenda "made the case" that a transition towards sustainable business models and practices present a significant set of economic, social, and political opportunities. Our work underscored the criticality of innovation at speed and scale across supply chains, businesses, and policy frameworks to facilitate this process.

As our *Call to Action: Innovate the Sustainable Future* so well describes, sustainability involves a complex set of interconnected elements across multiple dimensions: people and society, the economy, and the natural environment. And these dimensions

themselves relate to different international entities, stakeholders, and communities.¹

Leaders shape policy, framing the environments in which organizations and people operate and live. Leaders need to step up and create the conditions for pioneer sustainable projects to be initiated, setting the example and opening the doors for new business models and types of partnerships to be experimented.

In London, our colleagues at Gallup shared with us some key findings they have gathered over the years from analyzing the performance of individuals, teams, and organizations. Building on one's strengths is a key factor for performance and impact at all levels.

A distinctive characteristic of our organization is its capacity to connect and engage with leaders across geographies and sectors in uniquely content-rich settings. We will continue to build on this strength in 2024 and beyond.

Leadership is the driving force needed to transform realities and achieve sustainable development. Leadership matters. Your leadership matters, and we hope you can join us for the journey.

 $^{1-\}mathsf{GFCC}\ 2023, \mathsf{Call}\ \mathsf{to}\ \mathsf{Action-Innovate}\ \mathsf{the}\ \mathsf{Sustainable}\ \mathsf{Future:https://www.thegfcc.org/_files/ugd/f344ed_2fd539c7757d4f13a25d337a47965c5c.pdf$

Hope is in the Air

The year 2023 was marked by paradoxes, characterized by a mix of excitement and concerns stemming from technological advancements, the incredible opportunities offered by the energy transition, and the daunting realities of climate change. This duality was central to our activities at the GFCC, as we navigated a world filled with uncertainties. With climate change no longer a distant threat but a pressing reality, advancing the implementation of the Paris Agreement has shifted from a choice to a necessity. This scenario has prompted us to reinforce our commitment to sustainability and also to work with our community to broaden the concept itself in 2023.

The rapid acceleration of technology, particularly in Artificial Intelligence (AI), was striking in 2023. This swift advancement serves as a double-edged sword: it promotes innovation, but it also has the potential to trigger crises in communities and economies that have not yet taken action to modernize and

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Dr. Roberto AlvarezExecutive Director,
GFCC

reskill their workforce. Moreover, all communities and economies face new risks, including cybersecurity threats and the impacts of climate change. Stress-testing our systems before crises strike is crucial, an important lesson learned through our **Driving Innovation in Times of Crisis** (**DITC**) initiative in partnership with the Japan Science and Technology Agency (JST).

2023 was also marked by many joyful moments. The revival of in-person activities rekindled a sense of connection and collaboration, crucial to the GFCC experience and ethos. The unique energy of global gatherings, fostering the exchange of ideas and insights, is invaluable and forms

the cornerstone of our collective advancement. It was delightful to be in Greece, Portugal, Ireland, Brazil, the United States, and the UK with our colleagues and partners from around the globe.

This year, our belief in the fundamental link between sustainability and competitiveness garnered increased attention. Our Call to Action-Innovate the Sustainable Future called on various sectors and highlighted the diverse facets of sustainability environmental, social, and economic. Its development capitalized on our core GFCC Global Competitiveness *Principles*, insights from the **Now**. Bridge. Reboot., and Frame the Future series, as well as the extensive expertise within the GFCC network. This effort further stressed our commitment to a holistic approach to competitiveness.

As the year came to a close, a pivotal moment in our journey emphasizing sustainability was our participation at COP 28 in Dubai in partnership with the Council. The gathering of leaders from diverse sectors at the Innovation Arena underscored the

escalating momentum towards sustainability and showcased our network's strength and wealth.

Reflecting on 2023, my concluding thought is that amid crises and concerns, there is hope, potential, and opportunities. The strides in technology pave the way for new approaches for action and collaboration. The GFCC is ready to capitalize on these advancements, expanding our engagement platforms to amplify our impact.

As we enter 2024, our direction is unambiguous—to intensify our collective actions and endeavors to convert knowledge into tangible impact within the communities, regions, and countries that make up our network. We invite you to join us in this endeavor.



The GIS 2023 gathered leaders from 20 countries in London for two days of insightful discussions focused on the development of new business models, technologies, products, and institutions to advance the Agenda 2030 and meet sustainable development goals. On the third day, we went on a field trip to the University of Southampton.



We hosted **two DITC webinars** in partnership with JST. One of them was presented by our partner Gallup and explored emerging risks and their impending signs and reviewed historical moments when innovation flourished in times of adversity. The other session was featured on Science Agora, Japan's largest science and technology festival.



We welcomed **four new members**:
Bucharest University of Economic
Studies, from Romania, Harper Adams
University, Spectrum Index Ltd., and
Aston University, all three from the
United Kingdom.



Our global footprint spans **35 countries**, amounting to **43 members** and **65 fellows**.



We released **five new publications**, including a groundbreaking *Call to Action* offering recommendations to governments, universities, industry leaders, and civil society to act and frame sustainability as an opportunity, two post-webinar reports, and an exclusive DITC report.



We executed, co-hosted and participated in events on the ground in **8 nations** (Brazil, Greece, Ireland, Japan, Portugal, the UK, and the United States).



Our Competitive Edge blog continued to be a platform for our community to share knowledge and expose innovative ideas. In 2023, we published eight pieces featuring or signed by our members on various issues regarding competitiveness, ranging from China's energy strategy, sustainable development in Japan, global emerging risks, and others.

Visit our blog to have access to this relevant and exclusive content.

"Intellectual and creative collaborations lie at the heart of innovation. The world's complex issues around sustainability and liveability will only be addressed through collaboration. The GFCC gives me and my colleagues invaluable access to the rich work of leaders and thinkers from across the globe. Hearing the inspirational contributions of members steers optimism that, by working together, we will make a difference to what might otherwise seem insurmountable."

Prof. Ken SloanVice-Chancellor Harper Adams University

The GFCC has opportunities for government agencies, private sector entities, corporations, universities, research organizations, and individuals to become members.

We recognize the relevance of innovation and technology for competitiveness and the need for collaboration across sectors to pursue sustained economic growth. Our multi-stakeholder setting was designed to facilitate cross-sector dialogue and engagement.

The GFCC provides exposure and access to a unique network of global leaders, innovation agencies, corporations, and research institutes through its networking activities and knowledge-sharing platform.

GFCC members connect and engage with peers regularly, exchanging ideas and exclusive information, addressing challenges related to innovation and competitiveness, and comparing best practices. The GFCC facilitates engagements and promotes discussions.

There are multiple ways of engaging with the GFCC. Members can join our exclusive Monthly Calls hosted every second Tuesday of the month or one of our Expert Sessions. They also have access to our exclusive social media and collaboration platform, the GFCC Community.

There are also opportunities to host in-person events in partnership with the GFCC, such as workshops, forums, study missions, and others. Additionally, the GFCC hosts its flagship event, the Global Innovation Summit, every year in a different country, always in partnership with a member.

Mr. Ricardo Alban, President of the Brazilian National Confederation of Industry (CNI), joins the GFCC Board of Trustees.



Mr. Alban is a seasoned business leader who assumed the presidency of the Brazilian National Industry Confederation (CNI), a private sector

organization that unites the industry federations of all 27 Brazilian states, in October 2023. Previously, he served for nine years as the president of the Industry Federation of Bahia (FIEB), located in Northeast Brazil. During his tenure at FIEB, Mr. Alban focused on advancing corporate governance and driving innovation in the state, promoting R&D and investments in clean energy. He played a decisive role in establishing and growing a technology hub to support local manufacturing companies and facilitate the spin-off

of new ones, primarily through SENAI¹ Cimatec² and the Cimatec Tech Park, as well as by engaging with initiatives such as the Global Compact. Throughout his career, Mr. Alban has been committed to promoting the manufacturing sector through active participation in industry representative bodies and economic development organizations.

Board members provide strategic guidance and amplify the GFCC's voice internationally through the different organizations in which they participate. The Board of Trustees comprises GFCC founders; sustaining members invited by the Board; and two representatives from different membership classes, one from a corporation and one from a university, as established in the GFCC bylaws. Currently, the Board is composed of six members, along with three leaders from the GFCC team.

¹ SENAI is Latin America's largest private sector network of industry-focused technology and vocational education, technological support, and innovation institutes. SENAI is owned and operated by the system of industry federations in the 27 Brazilian states.

² SENAI Cimatec is a translational research and higher education institute owned and operated by the Industry Federation of Bahia (FIEB), in Brazil.

"The GFCC is a crucial global community that brings together academia, industry, government, and non-profit agencies at a high level. In our rapidly evolving society, this community plays a crucial role in recognizing and addressing global crises while identifying key issues for future competitiveness. Within the GFCC, diverse partnerships thrive, fostering trust through

practical projects. Our collaborative efforts are toward achieving greater competitiveness rooted in a shared commitment to social good."

Mr. Osamu Kobayashi Director, Department of International Affairs, Japan Science and Technology Agency

In 2023, we expanded our geographic and intellectual footprint, which now includes 43 members in 21 nations and 65 fellows in 25 countries—across North and South America, Europe, the Middle East, Australia, and Africa. In total, we are present in 35 different countries. About our new members:

- Spectrum Index, Ltd. from the U.K. Spectrum has developed a new competitiveness scoring system for nations based on the aggregation of published indicators in areas such as the economy, environment, governance, freedom, and entertainment. Since a nation's competitiveness is built on many factors—technology, workforce quality, infrastructure, investment, energy, government policies, and more—multidimensional indicators are needed to identify competitive strengths and weaknesses and balance economic, social, and environmental goals.
- Bucharest University of Economic **Studies** is the number one university in Romania. It has 23,000 students in 13 schools covering business and economics, law, economic cybernetics and informatics, finance and insurance, agrifood and environmental economics, and other fields. In the last ten years, the university has carried out nearly 400 projects in its advanced research institute and 23 research centers in cybersecurity, Artificial Intelligence, the Internet of Things, cleantech, circular economy, sustainable development, and digital transformation. It holds 300 bilateral agreements with 40 countries across Europe, Asia, and the Americas. It has partnerships with some of the world's top corporations, including Microsoft, Google, Oracle, P&G, Dell, Nestle, HP, and Samsung.

- UK's Harper Adams University is a unique institution set on about 600 hectares of farmland that is part farm, part think tank, and part invention hub. Harper Adams' research agenda focuses on science and technology applied to the agrifood chain, land management, food production, sustainable agrifood business, and agricultural technology. With this integrated approach, their research facilities span the chain—from microbiology and molecular diagnostics to crop field trials, livestock units, insect labs, food processing facilities, and kitchens.
- Also from the UK, Aston University
 is a public research university with
 a strong focus on career development and business engagement
 in areas such as energy efficiency,
 application of emerging technologies, product development, supply
 chains, collaboration in research
 and innovation, workforce development, and technology transfer.
 Research institutes include cutting-edge photonics and an institute focused on the full chain of



Aston University.

bioenergy and bioproducts. It has launched a new interdisciplinary Digital Futures Institute to address critical digital themes from Industry 4.0 and AI in health and medicine to workforce development and digital society. It has collaborated with small companies and global giants such as IBM, Airbus, BAE, and Nokia.

Our members are government agencies, private sector entities, corporations, universities, research organizations, and individuals who recognize the relevance of innovation and technology for competitiveness and the need for collaboration across sectors to pursue sustained economic growth. They strive to build mutually beneficial partnerships and engagements through our multi-stakeholder setting.

About our new fellows:

- Ms. Athina Chatzipetrou is the Non-Executive Director of the Board of the Ellaktor Group, the largest infrastructure group in Greece, and CEO and President of the Board of the Hellenic Development Bank, which facilitates small and medium-sized firms' access to finance. Previously, she served as Regional Finance Manager at Coca-Cola Hellas, Finance Director at Beiersdorf Hellas, and CFO of the Toyota Group in Greece. She also served as Finance Advisor at the Ministry of Development and Competitiveness, Advisor to the Netherlands enterprise agency and United Nations Economic Commission for Europe, as well as President of the Board and CEO of the Archaeological Resources Fund.
- Dr. Claudio Furtado is an expert in business economics, finance, private equity, and venture capital. He served as President of the National Institute of Industrial Property, an organization linked to the Brazilian Ministry of the Economy, and as a tenured Professor at the Fundação

- Getúlio Vargas (FGV), a premier business school in Brazil. He founded FGV's Center for Research in Private Equity and Venture Capital, serving as its Executive Director, and founded and led the school's Center for Distance Education. Furtado has served as a Board member at Norsa Inc. and Solar B.R. Inc., subsidiaries of Coca-Cola, and on the board of ATENTO Holding Investments and Telecommunications Services. He co-wrote the first and second Brazilian censuses of private equity and venture capital.
- Professor Jim Metson is managing the development of the Newmarket Innovation Campus at the University of Auckland. For seven years, he was the university's Deputy Vice-Chancellor for Research, and co-founded its Research Centre for Surface and Materials Science and its Research Centre for Light Metals. Metson was the Chief Science Advisor to New Zealand's Ministry of Business Innovation and Employment, and the government's representative on the Advisory Committee that oversaw development of the Australian Synchrotron.

He is a Director of The New Zealand Synchrotron Group, Director of the Research and Education Advanced Network of New Zealand, and chairs Auckland UniServices Ltd, the university's commercialization company. Metson actively contributed to developing the GFCC's URLF.

• **Professor Peter Smith**, from the University of Southampton, leads the Optoelectronics Research Centre—the largest research group in its field in Europe and one of the largest in the world. Its collaboration with the U.S. National Institute of Standards and Technology, Oxford, and Imperial College led to the first demonstrations and results on Boson Sampling, on-chip teleportation, and integrated transition edge sensors. His work with Oxford and NIST has been featured in Scientific American, Wired, and New Scientist. He founded two spin-out companies from the optoelectronics center. He also led

Southampton's Optical Engineering and Quantum Photonics Group and was Vice President for International Projects, having worked extensively with the GFCC in that capacity over the years.

Our fellows are a most distinguished group of leaders, thinkers, and globally recognized experts in their fields, with sterling records of accomplishment in business, government, academia, research, NGOs, and non-profits. They provide advice and carry our narratives into numerous domains, amplifying our voice worldwide. They also constitute a significant resource that members can access and count on to advance competitiveness strategy.

We look forward to mobilizing the incredible brain trust we gather in our community to build new partnerships and advance the competitiveness agenda in the countries represented in our network next year.

Reflections on Queen's University's Role and Future Partnerships

For almost 180 years, Queen's University Belfast has been at the forefront of innovation and groundbreaking research. It has provided both a safe haven to have difficult conversations and a platform for public debate and conferences on matters that can affect our future locally, nationally and globally.

As a university, we have made huge contributions to the society and the economy and helped find solutions to major challenges that have come our way throughout our history. We have provided young people with the opportunity to fulfill their potential and have turned out many individuals who have become highly influential in many fields.

Hosting the GIS 2024 will be another opportunity to play our part, a global showcase for what is happening in Northern Ireland while highlighting our critical role in the economic investment and development of the region.

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Sir lan Greer Vice-Chancellor of Queen's University Belfast

And if anyone needs proof of our ability to deliver a major international conference, they only have to look back to April 2023, when Queen's marked the 25th anniversary of the Good Friday/ Belfast Agreement with the Agreement 25 conference.

The themes of the conference summed up our approach. *Reflect, Renew, Reimagine*—reflecting on our past, renewing our commitment to peace and reconciliation, and re-imagining a better future for all in this region.

The three-day event brought together global leaders and the architects of the Belfast/Good Friday Agreement

to reflect on its achievements and to discuss the challenges and solutions needed for a peaceful and prosperous future. The event was attended by over 5,200 delegates, including students, school pupils, and civic, business, charity, and public sector representatives.

The GFCC was one of the key event partners for Agreement 25. The networks aims to accelerate productivity, growth, and prosperity—a goal that resonates with Queen's ambitions for Northern Ireland and beyond.

It is apt that the GFCC annual international conference will this year be held at Queen's as we are always thinking about how best to invest in our future. We invest in the future of young people, the future of the economy and the future of society. Our vision is to be a global-research intensive university, generating internationally leading research coupled with outstanding teaching and learning.

As well as education, Queen's is also central to the socio-economic success of Northern Ireland. Queen's impact on the economy is significant. A London Economics Report in 2022 showed we contribute over £3bn to the UK economy and that every £1 invested in the University generates £8.20 in return.

Working in partnership with significant institutions such as GFCC is vital in enabling us to work together towards a more prosperous future for us all. This conference will act as the springboard going into our 180th anniversary year, during which we will continue to reflect, renew and reimagine.

GFCC will again put us back in the spotlight and I am confident we can deliver a memorable and significant conference that will again demonstrate Queen's University's role in achieving the positive transformation of our society.

Annual Meeting and Global Innovation Summit

We gathered a cohort of influential leaders at Gallup's headquarters in London, UK, for the 2023 Annual Meeting and GIS. Unlike previous years, when we hosted extended versions of the Summit for participants inside and outside the GFCC community, our 2023 edition was a more intimate and dynamic leadership dialogue.

Innovate the Sustainable Future, discussions revolved around the role of innovation in advancing sustainability and meeting sustainable development goals, the use Al to improve energy efficiency and other resources, the future of the workplace, innovation in periods of crisis, the realities of



Global Competitiveness Awards at the 2023 Global Innovation Summit in London. Left to right: The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness; Dr. Datuk Mohd Yussof Sulaiman, Former CEO, Malaysia Industry-Government Group for High Technology (MIGHT), Malaysia; Dr. Hassan Rashid Al-Derham, Full Professor and Former President, Qatar University; Mr. Charles O. Holliday Jr., Chairman, GFCC; and Roberto Alvarez, Executive Director, GFCC.



Leaders from over 20 nations gathered at Gallup's European headquarters in November for the 2023 Annual Meeting and Global Innovation Summit.

emerging nations and of the African continent, among others relevant topics in the competitiveness agenda. Participants were invited to contribute to every discussion, commenting on initiatives in their home countries and sharing their experiences in academia, business, civil society, and government.

Effective ways to finance a fair and just transition emerged as a major missing link from the discussions. GFCC leaders in attendance highlighted the need

to find common ground on international forums, embracing asymmetries as an opportunity, considering the socio-economic disparities between the Global North and South and other mechanisms of local contexts. They concluded that connecting these different realities can catalyze the development of new solutions to today's problems.

We launched a groundbreaking publication, the *Call to Action: Innovate the Sustainable Future* (see page 36),



Mr. Simos Anastasopoulos, President, Council on Competitiveness of Greece; Prof. Razvan Bologa, Professor at the Bucharest University of Economic Studies; The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness; Dr. Hassan Rashid Al-Derham, Full Professor and Former President, Qatar University; and Professor Paul Maropoulos, Professor of Advanced Manufacturing & Director of Advanced Manufacturing Innovation Centre, Queen's University Belfast.

a powerful framework offering recommendations to various actors to act and frame sustainability as an opportunity. This publication emerged after three months of intense and highly interactive brainstorming and knowledge exchange sessions with our members and fellows.

Additionally, we also presented the Global Competitiveness Awards during the Summit. These laurels recognize prominent leaders whose voices and

insights have advanced the global competitiveness agenda in their organizations, cities, and nations. We were delighted to grant awards this year to Dr. Datuk Mohd Yussof Sulaiman from Malaysia and Dr. Hassan Rashid Al-Derham from Qatar for their leadership in their home countries and globally.

Our premier event also served as a stage for new partnerships catalyzed by the GFCC. Two of our members, Queen's University Belfast and Aston University, signed a Memorandum of Understanding (MoU) connecting the two institutions and their innovation ecosystems. This landmark agreement will enable collaboration and the exchange of best practices, making a concrete step toward advancing place-based innovation across our network.

Finally, we formally announced that the 2024 GIS, co-hosted by Queen's University Belfast and the Centre for Competitiveness, will take place in Belfast from November 11 to 15. Take a moment to save the dates on your calendar.

Driving Innovation in Times of Crisis

The COVID-19 pandemic brought out historical global disruption, stressed supply chains and health systems, and revealed that societies worldwide are ill-prepared to deal with crises. Motivated by discussions on economic and societal resilience in the aftermath of the pandemic, the GFCC started the **Driving Innovation in Times of Crisis (DITC)** in 2022 to deepen the understanding of crises and to offer insights to businesses, governments, and organizations on how to navigate times of turbulence and thrive in the face of adversity.

The initiative, in partnership with Japan Science and Technology Agency (JST), expanded in 2023 by recruiting three researchers. Over ten months, John Katsos, a Ph.D. candidate at Queens University Belfast, and Ailun Gu, a postdoctoral research fellow at the University of Auckland, developed extensive work and a series of interviews with GFCC members and fellows in a search to find a crisis definition that would allow multiple stakeholders to recognize impending crises

and act upon them to drive innovation and prosperity.

The result is the exclusive white paper Crisis Definitions and Frameworks that distills lessons from major crises of the past 100 years and establishes crisis as: "a recognized period of increased danger requiring action to limit severe and cascading consequences." The definition differentiates crises from disasters by considering disaster an event and a crisis a period marked by change when society shifts from one phase to the next. Additionally, the team of researchers published three case studies on the 9/11 terrorist attacks, the COVID-19 pandemic, and the ongoing armed conflict in Ukraine. The latter was written by Denys Ilnytskyy, an academic from Kyiv National Economic University.

Yet in 2023, the GFCC and JST hosted two webinars gathering experts in lively discussions about the intricate relationship between crisis and innovation. First, on August 2023, we invited Dr. Rogerio Studart, Distinguished Fellow at the GFCC and the

Brazilian Center for International Relations; Dr. Jerry Hultin, Distinguished Fellow at the GFCC and CEO of Global Futures Group; and Dr. Jonathan Filippon, Senior Lecturer in Health Systems at the Centre for Public Health & Policy of Queen Mary University of London, to review the lessons learned from three pivotal historical events: the 9/11 terrorist attacks, the Global Financial Crisis (GFC) of 2008, and the COVID-19 pandemic. The webinar Innovation Emerging From Adversity: Lessons from History highlighted how these events informed innovative policies and solutions to global challenges.

Second, on October 2023, the webinar *The Next Crises Emerging Risks* and How We Can Prepare explored how climate change, Artificial Intelligence, and geopolitical conflicts have changed the risk landscape, causing compounding effects. The event included insights from Mr. Christopher Geiger, Vice-President of Internal Audit and Enterprise Risk at Lockheed Martin; Ms. Margareta Dzerniek, Managing Partner at Horizon Group; and Dr. Nkem Khumbah, Head of STI Policy Systems, Governance and Partnerships at the African Academy of Science, and was live-streamed on Science Agora, Japan's largest science and technology forum. The discussions held at the two webinars are available online here.

Finally, during the 2023 Annual Meeting and Global Innovation Summit in London, GFCC members and fellows had a chance to review the results of the DITC, the crisis concept developed by the research team and the lessons gained through the analysis of past crises. Their discussions are documented on the report covering the summit that will be published shortly.

Monthly Calls

We continued welcoming GFCC members and fellows to our exclusive **Monthly Calls**. This recurring event serves as a platform for our community to review global developments, share updates, and access exclusive content in a trustworthy environment, bringing the knowledge and expertise in our network to the forefront.

The Monthly Calls happen online every second Tuesday of the month in two different time slots to allow participants across time zones to join the call at their convenience.

Every month, one of our members or fellows presents about a relevant topic in the competitiveness agenda. In 2023, our calls included presentations and discussions on:

- Socio-economic transformation through placebased innovation
- The energy transition and the role of China
- The sustainability and innovation agenda in Qatar
- Innovation and the role of precincts
- Rethinking globalization
- Eco-innovation in the manufacturing sector
- Lifelong learning to advance sustainability
- Generative Al and higher education
- Putting the EU Green Deal into practice

Expert Sessions

We continued to host our Expert Sessions, diving into relevant issues shaping the world and impacting competitiveness. These exclusive events started out in 2022 and are part of our exclusive offerings for members and fellows, presenting our community with an opportunity to interact with experts, ask questions, and send comments.

May 16

Global Emerging Risks and Organizational Resilience, with Mr. Christopher Geiger, Vice-President of Internal Audit and Enterprise Risk at Lockheed Martin Corporation, provided insights into the tools and strategies used by the company to deal with impending risks and build organizational resilience. Lockheed Martin employs a comprehensive framework that combines cross-functional risk assessments, encompassing ethics, risk management, data security, environmental safety, health, sustainability, and Al, to enhance risk coverage. Read our blog for a full coverage of the framework.





COP 28

We closed the year with a signature event in partnership with the Council at COP 28 Green Zone on December 6 in Dubai, United Arab Emirates. The pioneering **Innovation Arena** convened leaders from more than ten nations from the Global North and South for high-profile discussions on the most significant issues surrounding sustainability, climate change, and the energy transition.

On occasion, leaders across industries and sectors exchanged ideas, lessons, experiences, and insights, surfacing actionable solutions for decarbonization. The discussions focused primarily on innovation to advance sustainability, the frameworks needed to deploy technology at speed, and to build clean energy innovation ecosystems. Participants also discussed new ways of forging partnerships to create more sustainable, climate-resilient, and competitive economies and societies.

The fight against climate change is not just a responsibility. It holds significant economic possibilities. There



The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness, gives a speech at the GFCC Innovation Arena at COP 28.

is a need and an opportunity to create new business models and foster new solutions in multiple areas, such as renewable energy, green building, carbon capture and storage, sustainable agriculture, waste and natural resources management, etc.

But while markets play a crucial role, they cannot solve the sustainability challenge alone. Public-Private Partnerships (PPPs) are essential, with the GFCC consistently advocating for their pivotal role in advancing sustainability



GFCC and Council members at the COP 28 in Dubai. Left to right: Dr. Nkem Khumbah, Head of STI Policy Systems, Governance and Partnerships, African Academy of Science, and Senior Fellow, GFCC; Dr. Steven Ashby, Director, Pacific Northwest National Laboratory; Dr. Joan Gabel, President, University of Pittsburgh; The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness; Prof. Maurie McInnis, President, Stony-Brook University; and Dr. Ray Johnson, CEO, Technology Innovation Institute and Aspire.

in its work over the years. Collaboration between government, private sector, and civil society is crucial for lasting impact.

Building upon our 2023 *Call to Action—Innovate the Sustainable Future* and participation in COP 28, the GFCC remains committed to serving as a leadership platform to advance insight generation and action at the intersection of sustainability, innovation, and competitiveness.



Dr. Ray Johnson, CEO, Technology Innovation Institute and Aspire; Dr. Hippolyte Fofack, Research Associate, Harvard University and Distinguished Fellow, GFCC; and Nkem Khumbah, Head of STI Policy Systems, Governance and Partnerships, African Academy of Science, and Senior Fellow, GFCC.

University and Research Leadership Forum

In 2023, we continued to convene the University and Research Leadership Forum (URLF) to discuss the role of universities in fostering innovation ecosystems and contributing to the growth of local and regional economies. We were in São Paulo in September for the second edition of the Innovation Partnerships Forum in association with the Brazilian National Confederation of Industry (CNI) (see page 44), and we have started to develop a new initiative focused on place-based innovation starting in 2024.

For the next two to three years, the URLF will work towards creating a network of engaged universities committed to place-based innovation. The goal is to give visibility to critical assets and initiatives in the GFCC and to enhance the role of universities as catalysts of innovation through partnership with the communities they serve. We have announced that Prof. Aleksandar Subic, Vice-Chancellor and Chief Executive of Aston University, will co-chair the initiative.



The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness, Prof. Aleksandar Subic, Vice-Chancellor and Chief Executive of Aston University, Prof. lan Greer, President and Vice-Chancellor Queen's University of Belfast, and Chad Holliday sign Memoradum of Understanding

As a first step towards this achievement, we were pleased to facilitate the signature of a MoU between Queen's University of Belfast and Aston University, connecting their innovation centers to enable collaboration and best practices exchange.

In 2024, we will start to execute study visits to university-anchored innovation ecosystems around the globe. We are confirmed to meet in Birmingham in 2024 for our first URLF study trip in partnership with Aston University.

Strategic Foresight in Action—Towards Innovation and Sustainability

In 2023, MIGHT continue to undertake foresight and future studies initiatives across multiple industry sectors and to engage with diverse stakeholders. This unwavering commitment remains steadfast three decades since our establishment where the use of foresight is an essential tool that complements MIGHT's approach in the 3Cs, which mean conversation, collaboration and co-creation.

Foresight as a Conversation Tool for Insightful Ideation & Futures Exploration

Throughout 2023, MIGHT has undertaken a series of foresight activities in different stages of the innovation model towards enhancing Malaysia's global competitiveness and economic growth. MIGHT's role as a think tank involves igniting, catalyzing and cultivating conversations among diverse stakeholders. Through platforms like workshops, consultations, and seminars, MIGHT facilitates open dialogue

SIGNED BY



Rushdi Abdul Rahim President and Chief Executive Officer, Malaysian Industry-Government Group for High Technology (MIGHT)

and knowledge sharing, fostering a collaborative environment where ideas and insights are exchanged freely. In 2023, MIGHT has engaged over 3000 stakeholders from academia, industry, government, and civil society, to ensure that a broad spectrum of perspectives are considered, enriching the foresight process with diverse insights and expertise to obtain insightful ideas that continues to spur the innovation ecosystem. This has enabled MIGHT to gain insights into a variety of topics, subject matters, and disciplines.

From Conversations to Collaborative Development

MIGHT not only initiates conversations but also translates ideas into reality through the establishment of collaborative partnerships. In 2023, three partnerships were established with MIGHT to undertake studies to prioritize the development of new innovative solutions in emerging areas of nuclear technologies, air mobility and alternative proteins. Leveraging on MIGHT's prioritization matrix, impactful measures are localized effectively, paving the way for tangible progress. Together with our partners from ministry, agencies and industry organizations, we identify, prioritize, and co-create national high-impact projects and programs such as the creation of awareness on the confluence of climate and demographic changes on Malaysia and its governance implications for sustainable development amongst federal and state agencies that was undertaken with UNDP Malaysia.

Co-Creating Improvements and New Industry Development

By integrating foresight methodologies and market intelligence, MIGHT plays a crucial role in bridging the gap between innovative ideas and tangible outcomes. This concerted effort transforms cutting-edge technologies into actionable business opportunities, thereby catalyzing economic growth and fostering industry development. Often, these are in new and emerging areas that have yet to be established in Malaysia such as advanced air mobility. MIGHT's proactive efforts to anticipate future trends and drive strategic interventions act as reference points for industry and government to explore new areas of growth by leveraging on future opportunities and mitigating future risks and challenges. By utilizing a foresight approach, even a highly sensitive topic such as nuclear technologies adoption can be explored through the examination of multiple scenarios. This comprehensive approach allows for

the preparation and consideration of various potential futures, rather than relying on a singular outlook.

In summary, MIGHT's foresight activities are deeply rooted in its mandate as a think tank, providing advice to the government, shaping the development of industries though policy advice and intervention. By fostering conversations, collaboration, and co-creation, MIGHT ensures that its foresight initiatives are not mere academic practices but translated into actionable policies, strategies and action plans.

Call to Action

The 2023 Call to Action—Innovate the Sustainable Future highlights the central role of innovation in addressing the challenges and seizing the opportunities associated to sustainability. This dynamic and powerful framework offers recommendations to governments, universities, industry, and civil society to act and frame sustainability as an opportunity at the local and global levels. It acknowledges that sustainable progress hinges on a careful balance of short- and long-term goals at the intersection of environmental, social, and economic dimensions. Additionally, it underscores the urgency of taking immediate action and anticipates tangible short-term benefits of adopting sustainable practices.



Driving Innovation in Times of Crisis

This report documents efforts and accomplishments made by the GFCC and JST to understand crises and find opportunities for innovation throughout the first year of the initiative. It covers insights into disaster management in Japan and the methodology used at the oil multinational Shell to manage and neutralize future risks, called Shell Scenarios. Additionally, the report highlights the importance of learning from past crises to build future resilience and reviews critical topics related to future crises discussed during the 2022 GFCC Annual Meeting.



GIS 2022 Report

The report highlights key discussions and findings from the 2022 Annual Meeting and GIS, held in Athens, Greece, between November 14 and 16, with field trips to the city of loannina on November 17 and 18. Under the theme **Building Competitiveness**: From Local to Global, the activities in Greece addressed ways of advancing innovation in cities and regions to favor global competitiveness. Panels delved into Greece's national innovation strategy to revive the economy after the debt crisis by attracting private investments and revamping local industries and served as a platform for leaders to share insights and best practices considering their local realities. The report also gathers discussions on new economic models focused on sustainability and how to adapt priorities in periods of turbulence driven by the war in Ukraine and other disruptive global events.



"The GFCC has advanced strategic conversations on place-based innovation globally by bringing together international thought leaders and other stakeholders around this important topic, and by creating an effective forum for knowledge exchange. I am delighted that this year we have been able to establish a global university network to advance research, innovation and thought leadership in placemaking through innovation to drive socio-economic transformation, inclusive growth and sustainability."

Prof. Aleksandar Subic.

Vice-Chancellor and Chief at Executive Aston University.

25th Anniversary of the Good Friday Agreement

We had a historic opportunity to participate in a three-day conference in Belfast, Ireland, to remember the 25th Anniversary of the Good Friday Agreement. The high-profile event hosted by our member Queen's University Belfast from April 17 to 19 gathered global leaders to review the achievements of the landmark agreement and discuss future economic opportunities for the region.

"The tripartite Good Friday Agreement was a major triumph for bringing peace and stability to Northern Ireland after generations of sectoral strife and insecurity. We see Northern Ireland accelerating inclusive economic growth and high-value investment as it builds a new future as a center of creativity, advanced manufacturing, and innovation, delivering shared prosperity to all its citizens," commented GFCC President Deborah L. Wince-Smith.

Former US Secretary of State Hillary Clinton, who has been Chancellor of Queen's University since 2020, former US President Bill Clinton, UK Prime



Dr Steven Ashby, Director, Pacific Northwest National Laboratory; The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness; and Josh Parker, CEO, Ancora.

Minister Rishi Sunak, Ireland Prime Minister Leo Varadkar, and former UK Prime Minister Tony Blair were among global leaders who attended the conference led by Professor lan Greer, President and Vice-Chancellor of Queen's University. Ursula von der Leyen, President of the European Commission, and Charles Michel, President of the European Council, also addressed the public.

The tripartite agreement signed by the British and the Irish governments and political parties in Northern











Former U.S. Secretary of State Hillary Clinton, Chancellor, Queen's University; and UK Prime Minister Rishi Sunak also participated in the event.

Ireland with the support of the US ended decades of political violence and installed institutions to address policing, human rights, and decommissioning of paramilitary weapons, setting a landmark for other peacekeeping processes. Since then, Northern Ireland has been on a journey to build, maintain, and strengthen peace that transcends divisions.

"What the presence of all these people tells us is that building, maintaining, and strengthening peace in Northern Ireland is important to them and to the world. What was achieved 25 years ago is a testament to the power of democracy to transcend divisions, what can be achieved when people work together for a common goal and find a better way for everyone", argues Prof. Greer.

The third day was an economic summit hosted in association with the GFCC to discuss Northern Ireland Vision 2050. Conversations revolved around the opportunities and challenges to transform a region that came out from military conflicts as it transitions towards an innovation-driven future. The agenda included addresses from senior government officials and interactive panels. President Deborah I., Wince-Smith moderated a session on Global Northern Ireland with Dr. Steven Ashby, Director, Pacific Northwest National Laboratory; Ms. Sarah Friar, CEO, Nextdoor: Dr. Joan Gabel, President, University of Minnesota; Mr. Steve Orr, CEO, Catalyst; and Mr. Josh Parker, CEO, Ancora.

Delphi Economic Forum

At the end of April, GFCC leaders traveled to Greece to play a leadership role at the Delphi Economic Forum, led by its Founder and CEO, Mr. Symeon Tsomokos. For years, the GFCC has partnered with Delphi to provide exclusive content on a set of topics related to future growth, innovation, and competitiveness. The GFCC conducted two high-visibility panels during the forum, focusing on how technology is reshaping the future of work and the potential of leveraging technology and innovation to solve global challenges.

In Delphi, GFCC leaders discussed how increased automation and the rise of Al have made certain skills obsolete and displaced people from job markets while simultaneously creating new job opportunities and new ways of working. This rapid shift has put pressure on countries, regions, and cities to invest in reskilling and upskilling initiatives that could help the workforce transition to a new economy. The GFCC has been exploring skills development issues as crucial for economic growth and competitiveness for



The Hon. Deborah L. Wince-Smith, President, GFCC, and President & CEO, Council on Competitiveness; Dr. Ray Johnson, Chief Executive Officer, Technology Innovation Institute; and Mr. Chad Evans, Executive Vice President, Council on Competitiveness.

the Future Skills report highlighting megatrends affecting the global skills landscape and labor markets.

During the discussions, GFCC speakers in Delphi also looked at how technology can serve as a tool to address global challenges and help countries leapfrog. A critical example is related to climate change. New clean technologies can help to power the energy transition and the decarbonization of the economy while also expanding access to affordable energy across the globe.

CNI Industry Innovation Summit

The GFCC and its founder, the Council on Competitiveness (Council), partnered with our board member and long-standing partner CNI in the execution of the 10th Brazilian Industry Innovation Summit, which happened in São Paulo, Brazil, on September 27 and 28.

The Summit, the largest of its type in Latin America, mobilized business, academia, research, government and civil society organizations on panel discussions, presentations, and showrooms to explore sustainable paths for the Brazilian industry and policies to support research, development, and innovation. During the Summit, GFCC leaders joined various discussions and reviewed trends and new

parameters for sustainability in the business and industrial sectors, highlighting challenges and opportunities, and the investments needed to boost competitiveness.

The GFCC and the Council curated a delegation of leaders from relevant research universities, national laboratories, and corporations from the US, along with leadership from South Africa, Kazakhstan, Northern Ireland, Saudi Arabia, and Sierra Leone. This diverse array of global perspectives on eco-innovation facilitated by the GFCC and the Council networks played an important role in shaping a new vision for sustainability and competitiveness during the summit.



Leaders from the GFCC and the Council on Competitiveness networks at the 10th Industry Innovation Summit, in São Paulo, Brazil. (Credit: CNI)

Innovation Partnerships Forum

In a decade of growing global interconnectivity and accelerated technological change, universities are increasingly called to play an integral role in interconnected socio-economic ecosystems. They can shape, weave, supply talent and lead innovation ecosystems.

On September 29, we hosted the Universities in Action: Building Cross-sector Alliances and Making Impact on Society, a forum organized in partnership with our board member, CNI, in São Paulo, Brazil.

C-suite leaders from Brazil, the United States, South Africa, Kazakhstan, Northern Ireland, and Sierra Leone sat together to discuss innovative models for cross-sector alliances and partnerships between industry, universities, and governments focused on innovation and impact.

During the discussions, participants shared insights from their experiences in leading key initiatives, connecting universities and industry, developing talent, building local and national innovation capacity,



GFCC members and fellows at the Innovation Partnerships Forum, in São Paulo, Brazil.

implementing public-private partnerships and investing in innovative ventures and partnerships.

Additionally, participants explored a new paradigm for universities of excellence based on their evolving role responsive to socio-economic and community needs. For them, universities can no longer be considered excellent if they are not simultaneously relevant to their surrounding communities, connected to global trends, and able to generate wealth.

There is a growing demand for universities to develop and cultivate capabilities and organizational solutions to foster innovation through a system approach. These efforts must be assessed through new metrics and require new types of tools.

Finally, the second edition of the Innovation Partnerships Forum provided an occasion for leaders in the GFCC network to explore partnerships and opportunities for new projects with their counterparts in Brazil and to continue a dialogue that was started years ago.

After a year of extended leadership engagement and impact, we are set for a new period of activities in 2024.

We will continue to build and strengthen our community, working with members to disseminate best practices on competitiveness strategies and promote leadership dialogues in various parts of the globe. We want to create new opportunities to engage our members with innovation ecosystems worldwide through study missions and participation in international forums, expanding our global presence and engagement.

The GFCC will participate in the 9th edition of the **Delphi Economic Forum** from April 10 to 13 in the iconic city of Delphi. We are also exploring the possibility of engaging the GFCC Community in a trip to Bulgaria to participate in the **Regional Innovation Forum** hosted by our member GBS.

Additionally, we will continue to execute our **Monthly Calls** and **Expert Series**, and we plan to create a series

of discussions focused on translating the recommendations of the *Call-to-Action—Innovate the Sustainable Future* into concrete action, harnessing the insights and learnings on the matter in the GFCC network.

We will reignite the work of the URLF including a push toward expanding GFCC's university membership worldwide. Over the next two to three years, we will host a series of study trips, starting with the already mentioned visit to Birmingham.

Building on the success of the joint GFCC and Council Innovation Arena at COP 28, we also plan to partner with our board member, the Technology Innovation Institute (TII), to host a follow-up event in Abu Dhabi to advance the agenda outlined in Dubai in 2023. Additionally, we will investigate opportunities for participation at COP 29 in Azerbaijan.

Finally, we will travel to Belfast for the 2024 GFCC Annual Meetings and GIS, co-hosted by Queen's University of Belfast and the Centre for Competitiveness, between November 11 and 15.

Please save these dates on your calendar and check for updates on the events on our website.

Our distinctive network is fueled by partnerships and the unparalleled intellectual contributions of a growing membership. Together, we celebrate the fulfillment of a vision that leaders and countries can come together around the themes of innovation and competitiveness and learn from each other how to promote prosperity for all nations.

Thank you for your partnership in 2023. We look forward to working with you in 2024.

The GFCC is a multistakeholder membership organization with universities, corporations, government agencies, and an extended network of fellows in more than 30 countries. For more information about GFCC initiatives, **visit our website**.

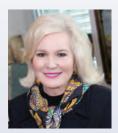
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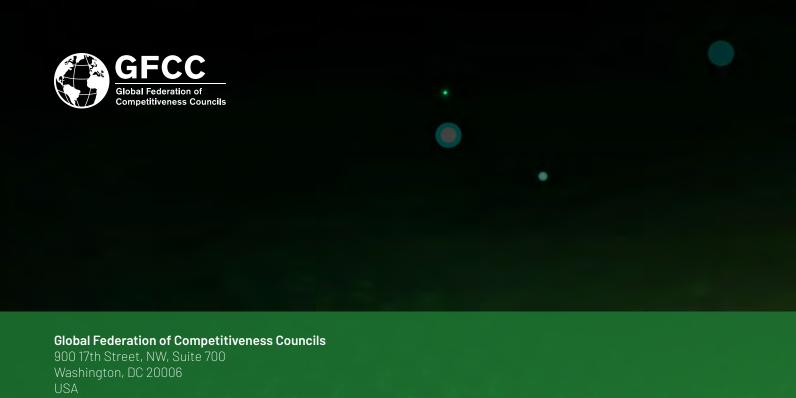
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