“2023 presented another challenging year for our industry but, thanks to your partnership and IFA’s vision, our association built on the progress made in 2022 to ensure that we are part of the solution to many of our world’s problems, most especially food insecurity.”

Alzbeta Klein, CEO, Director General
<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forewords</td>
<td>4-5</td>
</tr>
<tr>
<td>From the CEO/ Director General</td>
<td>4</td>
</tr>
<tr>
<td>From the Chair</td>
<td>5</td>
</tr>
<tr>
<td>Membership and Finance</td>
<td>6-7</td>
</tr>
<tr>
<td>Membership</td>
<td>6-7</td>
</tr>
<tr>
<td>Finance</td>
<td>8</td>
</tr>
<tr>
<td>Ensuring a Sustainable and Secure Global Food System</td>
<td>9-10</td>
</tr>
<tr>
<td>Promoting Transparency in our Industry</td>
<td>11-12</td>
</tr>
<tr>
<td>Setting the Global Scene with IFA’s Market Intelligence</td>
<td>13-14</td>
</tr>
<tr>
<td>Accelerating the Sustainability Transition</td>
<td>15-16</td>
</tr>
<tr>
<td>Science, Leading IFA into the Future</td>
<td>17-18</td>
</tr>
<tr>
<td>IFA: A Global Thought Leader on Sustainability and Beyond</td>
<td>19-20</td>
</tr>
<tr>
<td>Convening a Future Ready Organization</td>
<td>21-22</td>
</tr>
<tr>
<td>One Industry, One Voice</td>
<td>23</td>
</tr>
<tr>
<td>Who we are</td>
<td>24</td>
</tr>
<tr>
<td>IFA Secretariat</td>
<td>24</td>
</tr>
</tbody>
</table>

The International Fertilizer Association (IFA) was founded in 1927 and is the only global fertilizer association, with more than 480 members in some 81 countries. IFA represents providers of plant nutrition solutions. Members include fertilizer producers, traders and distributors, as well as their associations, service providers to the industry, research organizations, ag-tech startups and non-governmental organizations.
From the CEO/ Director General

"Throughout 2023, Sustain Africa provided nutrients to more than 1.7 million farmers in Sub-Saharan Africa, enabling much needed sustenance to millions more."

At IFA, we understand that food security cannot come at the expense of sustainability and in 2023 we continued to keep sustainability considerations at the forefront of our mission. At years’ end, with confirmation that 2023 was the planet’s warmest year on record, our board adopted an industry position statement on biodiversity, setting out our commitment to responsible environmental stewardship in nature protection. I am particularly proud of this IFA accomplishment, a major piece of work conducted through consultancy-led workshops with IFA members from around the world.

In September, our global Sustainable Fertilizer Academy (SFA), the industry’s engaging e-learning platform, celebrated its first anniversary. With this inaugural year under its belt, the SFA now has more than 230 students with 70 graduates and is offering selected classes to high priority target audiences.

After sixty years, IFA returned to its original home in 2023, opening a new office in the heart of central London. Located within the Grain and Feed Trade Association (GAFTA) premises, this milestone establishes two centers of excellence in both London and Paris, enabling us to enhance collaboration, access a wider talent pool, and expand our global reach. We warmly invite you to visit us whenever you are in either city.

While our physical footprint grew, so too did our membership numbers, and to a small degree, our staff. We now have 34 IFA staff from 18 different countries who speak more than 15 languages. Our membership grew to 484 members by the end of 2023. In May we welcomed a new Chair, Tony Will, President and CEO of CF Industries and two new appointments to the Executive Board. Later in the year, we welcomed a new Vice Chair, Raviv Zoller, President and CEO of ICL Group.

I look forward to working alongside Tony, Raviv, and the entire IFA family as we continue our shared vision to help feed the world sustainably. As always, we at IFA are here for you, our members. We work for you, and we represent your interests. Thank you for your continued commitment to our association.

Alzbeta Klein

2023 presented another challenging year for our industry but, thanks to your partnership and IFA’s vision, our association built on the progress made in 2022 to ensure that we are part of the solution to many of our world’s problems, most especially food insecurity.

The new year saw the expansion of our Sustain Africa initiative to improve the availability and affordability of fertilizers by smallholder farmers in the short and long term. Throughout 2023, Sustain Africa provided nutrients to more than 1.7 million farmers in Sub-Saharan Africa, enabling much needed sustenance to millions more.

The crisis of fertilizer availability, however, morphed into a crisis of affordability, placing increasing pressure on many importing and fragile markets. Our team pivoted quickly to provide data briefs and analysis to members, while our directorate took advantage of our industry’s seat at the global top table to meet prominent stakeholders in helping shape policies to tackle this crisis.

In June, Patrick Heffer, IFA’s Deputy Director General and I were invited to brief the US State Department on fertilizers. In August, I met with US Secretary of State, Anthony Blinken, to discuss new ways to increase global agricultural productivity and how best to tackle challenges in affordability, food security and decarbonization. These high-level engagements show how fertilizer remains an essential good, and how critical our industry is in helping influence the global agenda, particularly for G7 countries.
From the Chair

On behalf of the more than 480 members of the International Fertilizer Association (IFA), I am pleased to share our 2023 Annual Report.

Our industry sits at the intersection of some of the world’s most important challenges, from food security to climate change and transitioning to a lower-carbon economy – challenges that we are leading on today.

In 2023, our members produced and distributed over 180 million tonnes of plant nutrients and raw materials, helping lead to record crop production in many parts of the world. This has helped replenish global stocks of many of the crops essential to feed our growing planet, while we recognize the continued need to help eradicate global hunger and food insecurity.

IFA has also led the way on reducing the carbon footprint associated with the use of our products and improve the ecosystems from which we draw natural resources. IFA has driven a project to spread awareness around the factors impacting emissions from fertilizer use and to develop an industry-wide roadmap to reducing these emissions. Further, IFA, working with its members, developed an approach to the Global Biodiversity Framework (GBF). For more information on the IFA’s position on biodiversity, please read here.

Our industry also stands out in the race to decarbonize our world’s economy – both through decarbonization of our own assets and enabling hard-to-abate industries achieve their decarbonization goals. Our members have some of the largest scale decarbonization projects in the world scheduled to start-up in the coming years. Our members have also built leading partnerships with industries such as power generation and marine shipping to provide low-carbon products that will lower these industries’ carbon footprints.

Our progress is tangible and our commitment to continue to help the world thrive is unwavering. This includes building on our leadership addressing the challenges above, navigating ongoing global turbulence and preparing for the impact of disruptive technologies on our sector. In particular, IFA is monitoring the rapid expansion and adoption of artificial intelligence (AI) and the challenges and opportunities AI presents to our industry’s operations, as well as on the farm.

We are grateful for your partnership as we address these global priorities. We look forward to working with you, our members, and all our stakeholders to help advance this vital organization’s mission to promote the efficient, responsible, and sustainable production, distribution, and use of plant nutrients.
At the end of 2023, the number of members of the Association reached 484 covering 81 countries. The various categories of membership were represented as follows:

- 178 Ordinary members
- 181 Associate members
- 37 Correspondent members
- 88 Affiliate members

### New members

During 2023, 75 new members were elected as follows:

#### Ordinary Members
- AAA Holding Group Ltd (United Kingdom)
- Agriflex Pty Ltd (Australia)
- Agripower Australia Ltd (Australia)
- Brimstone Kimya Sanayi Ticaret AS (Turkey)
- Campo Forte Fertilizantes – JBS, SA (Brazil)
- Cheng Du Wintrue Holding Co., Ltd (China)
- Crosschem SIA (Latvia)
- Fertilizantes Compactados de Extramadura S.L.– Fercoex–DF Grupo (Spain)
- Fert-Map Private Ltd (Zimbabwe)
- Goudenkorrel S.A. (Poland)
- Hindustan Urvarak and Rasayan Ltd (India)
- Hunan Longke Agricultural Chain Co. Ltd (China)
- Marchi Industriale SpA (Italy)
- N. Fert – The National Company for Fertilizers and Chemical Industries (Egypt)
- P.T. Saraswanti Anugerah Makmur, Tbk (Indonesia)
- RNZ International FZE (United Arab Emirates)
- Sino-Agri Potash Co. Ltd. (Lao PR)
- Socar Carbamide Plant (Azerbaijan)
- Yinong Magfert Ltd (China)
- Egyptian Marketing Company for Phosphate and Fertilizers – EMPHCO (Egypt)
- Eren Trading Co. LLC (United Arab Emirates)
- European Bank for Reconstruction and Development – EBRD (United Kingdom)
- Fertcom LLC FZ (United Arab Emirates)
- Fertimaxi Industria Comercio E Serviço de Fertilizantes Ltda (Brazil)
- IK Group LLC (United Arab Emirates)
- Ixom (Australia)
- Javelin Global Commodities (UK) Ltd (United Kingdom)
- Jiangnan Environmental Technology Europe GmbH (Germany)
- King Philanthropies (United States of America)
- Kula Bio, Inc. (United States of America)
- Lushbury Fertilizer Corporation (United States of America)
- Merrycorn Pte. Ltd (Singapore)
- Midfert Misr – Elsafa Group (Egypt)
- N2 Applied (Norway)
- Naq Global Companies (USA)
- Norge Mining Ltd (United Kingdom)
- Novaphos Inc. (United States of America)
- OAN Industries Private Ltd (India)
- Osterwald Rathbone & Partners LLP (United Kingdom)
- Prony Resources New Caledonia S.A.S. (New Caledonia)
- Rawfert Offshore SAL (Lebanon)
- S.A. International (India)
- SA Services International, LLC (United States of America)
- Satyendra Packaging Ltd (India)
- SBN Shipping (Marshall Islands)
- Shandong Jinshifeng Agricultural Science and Technology Co. Ltd (China)
- Sky Fusion (Singapore)
- TalusAg (United States of America)
- Umex S.A. (Romania)
- UPL Ltd (India)
Membership Continued

- Verbrugge Temeuzen Terminals BV (Netherlands)
- Verdesian Life Sciences Inc. (United States of America)
- Xiamen Xiangyu Chemical Co. Ltd (China)
- Yunnan Yingfu Trading (China)

Affiliate Members
- Clean Air Task Force (United States of America)
- Estidamah – National Research and Development Center for Sustainable Agriculture (Saudi Arabia)
- Fertilizer Economic Research Institute (Japan)
- Organic Materials Review Institute – OMRI (United States of America)
- Planet Tracker (United Kingdom)
- Research Triangle Institute – RTI International (United States of America)

Correspondent Members
- Mr. Amine Kandil (Morocco)
- Mr. Naveen Kapoor (India)
- Mr. Michael Mew (France)
- Mr. Bhushan Rao (Singapore)

Resignations
There were 18 resignations during the year:

Ordinary Members
- Agrifert Malaysia Sdn Bhd (Malaysia)
- Borealis (Austria)
- Pacific Exim Pvt Ltd (Pakistan)
- Summit Agri-Business Corp (Japan)
- Total Energies Gas and Power Ltd (Switzerland)
- Ube Chemicals (Asia) PCL (Thailand)

Associate Members
- Australian Potash (Australia)
- Agven Private Ltd (Pakistan)
- Cleverfarm (Czech Republic)
- Daelim (Korea)
- DSS+ (Switzerland)
- Feeco International (United States of America)
- Olam Global Agri Pte Ltd (Singapore)
- Saipem SpA (Italy)
- Transglobe DMCC (United Arab Emirates)
- Trigg Minerals (Australia)

Name Changes
Ordinary Members
- Kavala Fertilizers Limited becomes Kavala Novafert Limited

Associate Members
- Swiss Singapore Overseas Enterprises Pte. Ltd. becomes Aditya Birla Global Trading (Singapore) Pte.Ltd.

Other Changes
Ordinary Members
- Swiss Singapore Overseas Enterprises Pte. Ltd. becomes Aditya Birla Global Trading (Singapore) Pte.Ltd.
- Brunei Fertilizer Industries Sdn Bhd started production and joined the Ordinary Members category

Associate Members
- International Finance Corporation (IFC) joins the Associate Members category
- Kisan International Trading FZE is now fully integrated in IFFCO membership
- Trammo joins the Ordinary Members category

Membership Termination
Ordinary Members
- JSC “Gomel Chemical Plant” (Belarus)
- PFIC Ltd (Greece)
- Tunisian Indian Fertilizers – TIFERT (Tunisia)

Associate Members
- TUV Austria Turk (United Arab Emirates)

Correspondent Members
- Dr. Ray Hoyum (United States of America)
- Mr. Michel Le Rigoleur (France)
- Mr. Gerald Tarbet (United Kingdom)
Finance

Total operating income reached €11.68 million in 2023, up from €10.77 million in 2022. The income from subscriptions increased by 14 per cent to €6.59 million, thanks to the additional contributions from 75 new members who joined in 2023 and a 5 per cent increase in subscription rates to offset inflation.

The revenue from conferences and meetings increased by 20 per cent to €4.64 million, due to the success of key events such as the Annual Conference and the Crossroads Asia-Pacific Conference. The other revenues from special projects and the Sustainable Fertilizer Academy amounted to €452,459.

The operating expenditures increased by 8.2 per cent from €10.15 million in 2022 to €10.98 million, mainly due to higher staff costs and conference's organizational costs. On the other hand, the external consultancy fees decreased because of the lower expenditures on special projects.

The total expenses related to the Scientific Panel amounted to €770,522, compared to €676,535 in 2022. 40% of these expenditures was financed by the dedicated fund coming from the IPNI reserves and registered as “other reserves” in IFA accounts.

The financial activity resulted in a surplus of €556,084, against a deficit of €304,614 in 2022, thanks to the recovery of the financial markets and the higher returns on short-term investments.

The year ended with a surplus of €1.21 million, compared to a surplus of €395,042 in 2022. However, after allocating 40% of the Scientific Panel expenses to “other reserves”, the comprehensive income of the year amounted to €1.53 million, compared to a comprehensive income of €863,905 in 2022.

Despite the surplus, there is no corporate tax payable for the year as the Company had tax loss carry forward of €1.6 million from previous years in France.

Details of the Association’s financial situation in 2023 are provided in the “Audited Accounts at 31 December 2023” attached to the Annual Report.
Ensuring a Sustainable and Secure Global Food System

Throughout 2023, IFA’s Secretariat continued the mission set out by our board: to move the industry forward on sustainability pathways.

However, protracted global conflicts and crises challenged the direction of this mission, starting at the outset of the new year with a continuing crisis of fertilizer availability.

Thanks to our Sustain Africa initiative, forged in partnership with Rabobank and the Bill and Melinda Gates Foundation, we worked tirelessly throughout the year to get fertilizers to farmers in desperate need of them, particularly in Sub-Saharan Africa. We worked with policy makers and our members to provide effective rapid-response solutions and offering relief to some of the hardest-hit countries.

As 2023 progressed, and wholesale and retail fertilizer prices came down from the previous year’s peak, a new challenge emerged: a crisis of affordability caused by extreme market volatility, high levels of debt in many developing countries, and a strong US dollar. This new crisis placed increasing pressure on many importing and fragile markets and exacerbated food insecurity. When you add extreme hunger to the mix, it changes a lot of priorities, and our Secretariat moved rapidly to deal with this new challenge.

IFA retained its newly acquired seat at the top global tables and in June, IFA’s Director General Alzbeta Klein and Deputy Director Patrick Heffer were invited by the United States’ Department of State to brief senior staff on the fertilizer affordability crisis. That same month, alongside the Secretary General of the World Trade Organization, Ngozi Okonio-Iweala, and experts from the United Nations and International Grains Council, Alzbeta took part in a lively trade dialogue on the Black Sea Grain Initiative. The following month, alongside esteemed counterparts, Alzbeta also spoke at a special event on fertilizers at the UN Food Systems+2 Summit.

Alzbeta wrapped up the summer by meeting with US Secretary of State, Anthony Blinken, in August to discuss new ways to increase global agricultural productivity and how best to tackle challenges in affordability, food security and decarbonization. U.S. Special Envoy for Global Food Security, Cary Fowler, also joined the IFA Board of Directors meeting in Prague, Czech Republic, to deliver a keynote speech on issues of global food security.

Images This page: IFA CEO and Director General, Alzbeta Klein, joins a roundtable hosted by Secretary Blinken in August 2023. Next page: IFA / Eurasia Group high level dialogue during UN Climate Week
Managing the competing issues of fertilizer availability, affordability and food insecurity presented a challenge throughout 2023, but sustainability – our top priority - never left the table. While short-term trade-offs exist, in the long term, environmental sustainability and food security are inseparable. This was never more apparent than in 2023, the year that shattered all previous records to become the hottest ever recorded.

In September, our global Sustainable Fertilizer Academy (SFA), the industry’s engaging e-learning platform, celebrated its first anniversary. Two months later, on the anniversary of the approval of the historic Kunming-Montreal Biodiversity Framework, IFA published an industry position statement on biodiversity. Moving forward, IFA will continue to prioritize soil, land, and water protection through our sustainability efforts, along with taking proactive steps to reduce the industry’s biodiversity footprint and limit or reverse any negative impacts.

As geopolitical conflicts increase and we move into 2024, many underlying threats continue. Food insecurity, climate change, biodiversity loss, and water stress are intertwined global risks that require a coordinated and focused response. Thanks to the commitment and ambition of our members, IFA is well-positioned to face these challenges, and to provide solutions to the most pressing global issues of today.
Promoting Transparency in our Industry

In April 2023, IFA released a highly anticipated report of our assessment of global phosphate rock resources and reserves. The first global review since 2010, the landmark report was conducted in partnership with Argus Media. The analysis – which examined deposits in more than fifty countries – reveals that there are currently over 300 billion tonnes of global phosphate rock resources, of which about 200 billion tonnes is technically recoverable ore using current technology (the reserve base). If we consider the middle-ground demand scenario laid out in the study, technically recoverable phosphate is anticipated to last more than 300 years.

Phosphorous, an essential nutrient to support the world’s population food needs, has no substitute. While at the global level there are sufficient accumulations of mineable and processable phosphate rock for centuries to come, our study highlights the need to pay due attention to mining and processing efficiency, the recovery and recycling of phosphorous from various waste streams, and more efficient use of phosphorous on the farm. It also considers alternative scenarios, such as the fast development of the lithium-iron-phosphate (LFP) battery market. The report demonstrates the transparency of the fertilizer industry on the issue while emphasizing the need for the sustainable management of phosphate resources.

IFA would like to thank ICL, IFFCO, Ma’aden, Mosaic, Nutrien and OCP for sponsoring the study which can be accessed here. If you’d like to learn more, please tune into this podcast with IFA’s Deputy Director-General, Patrick Heffer, and Fertilizer Consultant at Argus Media, Matt Lisley.

Images IFA / UM6P Africa AgTech Startup Showcase at the IFA Annual Conference 2023
Stimulating the development of innovative plant nutrition solutions continues to be a top priority for IFA. In 2022, to foster closer partnership with the AgTech startup ecosystem and to stimulate entrepreneurship on the African continent, IFA launched the popular Africa AgTech Start Up Showcase. Formed in partnership with the Mohammed VI Polytechnic University (UM6P), we were delighted when nearly 200 startups applied to participate in the showcase. After careful consideration by a jury of IFA and UM6P judges, a shortlist of 30 startups advanced to the next stage, each of whom were interviewed by our panel early in the new year. The eight finalists then pitched their solutions to a jury of experts – including voting by delegates – at IFA’s Annual Conference ‘Demo Day’ on May 22 in Prague.

The final prize of €20,000 was awarded to Phospholutions, a startup that aims to enhance the efficiency of global phosphorous use and promote more sustainable food production. The runner up prize of €10,000 was awarded to Farmer LifeLine Technologies, a Kenyan startup that has developed a solar-powered device that scans crops, alerts farmers to pests or diseases, and provides recommendations on fertilizers or pesticides.

“We were delighted when nearly 200 startups applied to participate in the showcase.”
Setting the Global Scene with IFA’s Market Intelligence

The global fertilizer market faced another challenging year in 2023, underpinned by macroeconomic pressures, continued high feedstock costs and logistical disruptions.

Throughout, IFA’s Market Intelligence (MI) Service provided a steady and critical stream of data briefs and analysis to members, helping them navigate challenges in affordability, supply chain reorganization and intensified competition.

Thanks to the generosity of our members, in 2023 the Market Intelligence service completed and launched the highly anticipated data transformation project, embedding new data ingestion tools, more efficient survey methods and data visualization dashboards into IFA’s website and databases. With final bug testing completed early in the year, IFA members are already benefitting from our more efficient, secure database, using our revamped surveying tools in addition to receiving the advanced analysis capabilities and reports that come with the new system.

With less manual work now required of our MI analysts, the improved database frees up valuable expert time, allowing staff more opportunities to explore new areas of research and topical trends.

In 2023, our Market Intelligence staff took to the road, trading desk research for meaningful in-person conversations with

Images: Top: Laura Cross Market Outlook Annual Conference, Middle: IFA visit to Prayon, Bottom: IFA visit to Woodsmith mine
members at their offices, production sites, port terminals and partner farms. Highlights included a ten-day tour encompassing plants and mines in China, and seeing decarbonization projects and specialty fertilizer producers in the Middle East. In July, after a two-year hiatus, the Service held a successful Global Markets Conference in London, bringing delegates up to speed on key market drivers and emerging trends in the industry.

In November, amid the escalating crisis in Gaza, the Market Intelligence Service released its Short-Term Outlook. Analyzing multiple scenarios, the report examined how the situation in Gaza has the potential to affect neighboring fertilizer exporters, highlighting the global importance of the Middle East as a shipping transit hub in an already tight freight market. Looking ahead, politics will play a significant role in 2024, with almost 2 billion people in more than 70 countries due to vote in national elections. The Market Intelligence Service will be tracking the topics on the table in these elections, several of which could have implications for fertilizers.

IFA’s Short-Term Outlook report, and other 2023 Outlook presentation series and reports are available to IFA members on IFASTAT.

Images Top: Armelle Gruere, Market Outlook Annual Conference, Middle & Bottom: Laura Cross and Volker Andresen visit China 2023
Accelerating the Sustainability Transition

At IFA, sustainability constitutes the beating heart of our mission, helping drive meaningful momentum for all our members towards a greener, more efficient, and sustainable future.

Thanks to our Global Sustainability Platform, in 2023 our Sustainability Service shaped key content for successive IFA conferences, creating impact in sustainability, climate, energy, and nature-positive transformations.

In 2023, we celebrated a major milestone, marking the first anniversary of our global Sustainable Fertilizer Academy (SFA), the industry’s unique and engaging e-learning platform. With this outstanding inaugural year under its belt, the SFA now has more than 230 students with 70 graduates. It offers dozens of selected classes to high priority target audiences in English, Spanish and Portuguese, and with Arabic and Turkish subtitles coming soon.

This year, the Academy also opened its virtual doors to the public, thanks to the creation of the ‘À la Carte/On Demand’ option, a tailored learning experience for diverse audiences. A pilot project of this initiative was initiated with the Brazilian government, agriculture-focused university programs, and Mosaic Brazil. It includes approximately 800 Brazilian stakeholders and students and aims to educate local policymakers about sustainable fertilizers. We expect this course to be replicated in other countries. In another exciting development this year, Sino-Agri live-streamed an SFA class to nearly one million agronomists across China.

Looking ahead, we are excited to build on the success of the SFA and to work with our members to build content specific courses, as requested by them.

Helping Members Integrate Biodiversity

As biodiversity continues to dominate boardroom agendas the world over, in 2023 we held two high-level biodiversity events in close partnership with our Public Affairs service colleagues at the Rome Dialogues in March and at our IFA Annual Conference in Prague in May. The well-attended Prague session highlighted the significance of the recently approved United Nations Global Biodiversity Framework.

Building on collaboration with leading consulting firm, McKinsey, at our Rome Dialogues, McKinsey consultants provided guidance on how companies can best integrate biodiversity into their strategic and corporate plans. These priority areas included nature and natural resources preservation, target setting and progress monitoring. More information on our biodiversity initiatives can be found within the Public Affairs Service section of this report.
A Building Block of Sustainability

In July, we published our Sustainability Report, detailing how IFA’s vision for productive and sustainable agriculture systems that contribute to a world free of hunger and malnutrition aligns with, and complements, the world’s sustainability goals. Building on our first Sustainability Report, published in 2020, this report outlines the recent progress we have made as an industry on sustainability, from productions sites and mines, to the farm, all while facing geopolitical, trade, and other constraints. Highlighting developments on Scope 1, 2 and 3, the global Ammonia Technology Roadmap and other gains, the report provides a building block that will help our members fine-tune their sustainability strategies. We look forward to partnering with members on various sustainability initiatives and to continue building on the solid foundations of the past years.

Keeping Ahead of Artificial Intelligence

IFA is keenly watching the rapid expansion and adoption of Artificial Intelligence (AI) in our industry’s operations, and on the farm. From in-depth discussions with our members, we understand that while few companies have embraced AI in their operations, the large majority has limited AI use to ChatGPT and Copilot. Recognizing the appetite to learn more about generative AI among our members, our service dedicated two sessions at IFA’s Strategic Forum in Doha to AI in fertilizer production and fertilizer use. To keep pace with the rapidly evolving AI landscape, IFA will initiate a Working Group dedicated to AI best practices in the fertilizer industry. We welcome Chief Information Officers or Chief Technology Officers from our member companies interested in this topic to join this group.

Pathways to a Low Carbon Economy

Since the success of the IEA’s global Ammonia Technology Roadmap (ATR) in 2021, IFA’s Sustainability Service has been working with multiple stakeholders around the world to develop local decarbonization strategies. Alongside the European Bank for Reconstruction and Development, we initiated a Low-Carbon Pathway (LCP) project with the Egyptian government and local fertilizer industry. In 2023, we were also invited by the Turkish Ministry of Industry and Technology to assist in helping Turkey design its LCP. This initiative will help Turkey outline emission reduction strategies for production and field emissions by 2050, define stakeholder roles, quantify investments and policies, and set sustainable transition milestones. Following Canada and the European Union’s example in initiating their LCPs, we expect many more countries to follow suit.
Science, Leading IFA into the Future

Science is the bedrock of IFA’s work, guiding everything we do. In 2023, our Science Program undertook numerous strategic initiatives to continue our mission to promote responsible plant nutrition and enhance nutrient stewardship worldwide. In partnership with the University of Nebraska-Lincoln, IFA began a joint initiative to explore in greater detail the extent and severity of potassium deficiency, which may be hampering many cropping systems around the world. Sponsored by seven IFA members, the two-year project will compile and analyze a comprehensive inventory of global data on potassium – an essential nutrient for plants – for major crop systems around the world. The data will be compiled in partnership with a wide range of leading researchers in multiple countries and will initially focus on main cropping systems in South and North America, South Asia, East Asia, Southeast Asia, and Sub-Saharan Africa.

This project will provide essential data to national agricultural research and extension programs on how to improve crop production through better nutrient management and fertilizer recommendation. Thanks to the initiative, countries will be better able to understand and address their potassium-related crop challenges, which remain poorly understood in many crop growing regions. That progress can help achieve the crop yield advances needed to meet the world’s growing food demand.

Promoting Transparency

In a notable collaboration to make the use of fertilizers in global crop production transparent to the public and to all stakeholders, this year IFA and agri benchmark Cash Crop announced the start of a joint project to collect data on the quantity of fertilizer used in key crops within all major fertilizer-consuming countries. The global roll out – which comes after the completion of a successful pilot in seven countries across six continents - is a significant step forward in monitoring fertilizer usage in crop production around the world. It will gather detailed data on fertilizer application for key crops and grasslands, covering over 70% of arable land.
The insights gained over the next three years will be vital in improving our global understanding of nutrient use, balance, and efficiency, and in promoting sustainable farming practices.

Science for Sustainability and Plant Nutrition

Throughout 2023, IFA’s Chief Scientist, Achim Dobermann, continued his active role with the Scientific Panel on Responsible Plant Nutrition (SPRPN), a collective of scientific experts dedicated to advancing responsible plant nutrition practices. As advocates of responsible plant nutrition, the SPRPN seeks to empower policymakers, food traders, service providers, and consumers in their decision-making processes. This year, IFA helped shape two important SPRPN issue briefs, (i) Defining Nutrient Use Efficiency in Responsible Plant Nutrition and (ii) Plant Nutrients are Essential for the Alleviation of Chronic and Hidden Hunger. The SPRPN’s aim is not only to educate, but also to question norms and offer innovative solutions and we encourage IFA members to provide comments, critical feedback, and open discussions on these briefs.

“...in improving our global understanding of nutrient use, balance, and efficiency, and in promoting sustainable farming practices.”

Dr. Jian Feng Ma
Professor at the Institute of Plant Science & Resources

In 2023, at the Strategic Forum in Doha, IFA was delighted to once again honor three distinguished scientists for excellence in plant nutrition science, innovation, and extension for sustainable development.

The 2023 IFA Norman Borlaug Plant Nutrition Award recipient is Dr. Jian Feng Ma, Professor at the Institute of Plant Science & Resources, Okayama University, Japan. Dr. Feng Ma received the prestigious award for his groundbreaking research in plant nutrition spanning over three decades. Dr Ma’s efforts hold promise for safer, more productive crop production.

The IFA Emerging Scholar Award was awarded jointly to two outstanding recipients, Dr. Chelsea Janke from the University of Queensland, Australia, and Dr. Shan Li from the College of Agriculture at Nanjing Agricultural University, China.

On behalf of our members, we congratulate each of our winners for their commitment to our sustainable future.
IFA: A Global Thought Leader on Sustainability and Beyond

Throughout 2023, IFA's Public Affairs Service strengthened the industry's position as a thought leader on critical societal issues including food security, agriculture, biodiversity, climate change and plastic pollution.

In the autumn of 2022, on the margins of Climate Week in New York City, IFA and Eurasia Group held a high-level dialogue on the complex relationship between food security and climate change. The panel, which included former Ethiopian Prime Minister, H.E. Hailemariam Dessalegn, the FAO Chief Economist and several IFA members, addressed a question: How far has the current food security crisis pushed back long-term climate and biodiversity goals? Final recommendations highlighted the need to focus on soil health, to develop long-term financing, and warnings against national and regional protectionist policies.

Recognizing that transformation can only be achieved if the whole agrifood value chain works more closely together, IFA partnered with World Business Council on Sustainable Development and invited food companies and IFA members to participate in a business roundtable on the margins of COP28 in Dubai. Fifteen CEOs and senior leadership representatives of input, supply, food-producing, and finance companies assessed progress and discussed the roadblocks towards reaching the climate and nature-positive goals for their operations.

Rome Dialogues: Corporate Reputation and Biodiversity

In March 2023, alongside our Sustainability Service colleagues, we held the IFA Rome Dialogues to help members understand new global reputational drivers and their corporate impact and to interact directly with representatives from the Food and Agriculture Organization (FAO), academia, and farmers. The final day was dedicated to a workshop on biodiversity led by McKinsey. Under the guidance of McKinsey consultants and the IFA Secretariat, members learned the best way to embed biodiversity into corporate disclosure and communication strategies.

Demonstrating Leadership on Biodiversity

Ahead of other industries, IFA has blazed a trail by placing a top priority on the importance of biodiversity loss. Throughout 2023, we helped our members get in front of the issue, providing guidance on how the industry should align itself with the Global Biodiversity Framework. Thanks to the work of our Biodiversity Taskforce and, based on the outcomes of the two workshops with Eurasia Group and McKinsey, in December IFA published an industry position statement on biodiversity. The statement sets out the industry's commitment to responsible environmental stewardship in nature protection. It was the first time the industry had released such a statement, signaling our strong leadership on the issue, and enhancing the fertilizer industry's reputation.
Ahead of Policy Developments in Plastic Pollution Reduction

Throughout 2023, the Public Affairs Service monitored major United Nations developments in global plastic pollution reduction policy. The Public Affairs Service continued to engage closely with the Food and Agriculture Organization (FAO) and to advise and educate them, as they work to develop a Code of Conduct for the Sustainable Management and Use of Plastics in Agriculture.

Our advocacy aims to ensure that the controlled release fertilizers’ benefits and value are well understood. We also leveraged the fertilizer bag reuse and recycling project in Africa to illustrate proactive industry leadership in developing new solutions. In parallel, throughout the year we also monitored the initial developments of an international United Nations treaty on plastic pollution reduction.
Convening a Future Ready Organization

In 2023, our Conference Service left the world of virtual meetings behind, encouraged by the enthusiasm of our members to meet in person and forge connections face-to-face.

This energy transmitted into unprecedented milestones, with record-breaking attendance, sponsorship engagement, and exhibition success, all against the backdrop of global uncertainty and a complex geopolitical environment. In addition, cutting-edge data technology integration continues to enhance our attendees’ personalization of participation, resulting in deeper engagement.

90th IFA Annual Conference, Prague

In May, amid the remarkable architecture and Old Town charm of Prague, the capital of the Czech Republic, IFA’s 90th Annual Conference broke all records in terms of attendance and scope. With more than 1,400 attendees, the largest ever at an IFA conference, the three-day event also exceeded expectations in the number of sponsors engaged, rooms booked, and exhibitions held.

Under the theme "Fertilizers 2023: Where Food and Energy Markets Meet", the conference reflected the increasingly high-profile nature of the sector and how critical our industry has become in helping influence the global agenda. Among many inspirational events, a panel of high-performing young fertilizer leaders discussed why integrating gender in the workplace is good for business. Another highlight was ‘Demo Day’ on May 22, when the eight finalists of the Africa AgTech Startup Showcase pitched their solutions to a jury of experts, including delegates.
IFA Crossroads Asia-Pacific Conference, Bangkok

Sustainability dominated the agenda at the ever-popular IFA Crossroads Asia-Pacific Conference in the 'City of Angels', Bangkok, in October, with a record-breaking attendance of almost 500 delegates from nearly 270 companies. Gaining in popularity with each passing year, our keynote speakers addressed issues ranging from regional fertilizer supply, agriculture, and agronomic matters. On the final day of the conference, IFA’s Market Intelligence service presented the outlook for Southeast Asian markets.

IFA’s Strategic Forum, Smart & Green, and Rome Dialogues

IFA’s Strategic Forum, held in November in Doha, Qatar, was set against the backdrop of a new and complex geopolitical crisis. Under the theme of ‘Leadership in an Accelerating World’, the keynote speaker, Mr. Rohitesh Dhawan, President and CEO of ICMM, set the tone for a lively exchange about leadership dynamics in a rapidly evolving landscape. The topic of innovation also featured prominently over the three-day event with discussions about how to harness innovation and technology for the benefits of the industry.

In February, our working group event, the Rome Dialogues, designed to help members leverage new global driving forces to achieve more impact, included an engaging series of plenary sessions, Strategic Advisory Team and Steering Group meetings, along with a one-day workshop on biodiversity.

While this year was marked by a return to in-person events, we have not abandoned our virtual format. IFA’s Smart & Green Virtual Conference in February kicked off our conference season by welcoming over 300 delegates from 156 companies in 54 countries. Innovation, startups, and the market for special products dominated the agenda.
Throughout 2023, IFA’s Communication Service helped the industry maintain one voice on issues of strategic importance, while engaging with tier one media outlets and international trade press.

IFA spokespeople gave interviews to the New York Times, Nikkei, the New Internationalist and World Grain, in addition to our continuing close engagement with Bloomberg and the Financial Times.

In March, the new IFA public website – a ‘one-stop shop’ for information about IFA and the fertilizer industry – was launched. Over the past few years, the fertilizer industry has been under the spotlight to a degree few of us expected. This new website is part of a significant communications effort to educate and inform all our audiences about the work of the industry, what we are doing to support the sustainable production of food for an increasing global population, how relevant this industry is for food security, and how we work on solving sustainability challenges.

The site has a fresh new format featuring animated infographics, an interactive world map and informative content on a range of topics relevant to IFA, our members, and our global web audience. The site saw a peak in web traffic on launch day, with top new users coming from the United States, India, China, and the United Kingdom. Our social media footprint also grew throughout 2023, with IFA’s LinkedIn page gaining 4,000 new followers in the latter half of the year.

In March, at the Rome Dialogues, our Communications Steering Group finalized and approved the global industry narrative. A high-level document that sets out the industry’s ‘story’, this narrative will be used to create tools and products for use across all of IFA’s communications and will be of additional help to our members in communicating our shared global messages.

IFA on the Road

With Covid-related travel restrictions firmly in the rearview mirror, in 2023 IFA took to the road, marking the first year since the pandemic when business travel for our staff was back in full swing. While we held major events in Rome, Prague, London, Bangkok, and Doha, we also made connections in a more personal sense, visiting our members at their offices, production sites, port terminals and partner farms. In 2023, we visited more than 15 member operations in ten countries, giving us unique access to insights and partnerships that desk research and video calls cannot replace. We extend enormous gratitude to all our members and partners who hosted us so graciously this year.
IFA Secretariat*

1. Achim Dobermann  
Chief Scientist

2. Alexandra Dorison  
Sustainability Education Coordinator

3. Aline Bortot  
Webmaster

4. Alzbeta Klein  
CEO & Director General

5. Annie Cohen  
Membership Manager

6. Armelle Gruère  
Program Manager – Demand

7. Aurélien Palaric  
Chief Financial Officer

8. Aya Benmoussa  
Junior Analyst, Africa Policy & Strategy

9. Cameron Ludemann  
Data Scientist

10. Claire Newell  
Director, Communications and Marketing

11. Dana Taylor  
Executive Assistant to the DG

12. David François  
Director, IT

13. Déborah Ragal  
Junior Accountant

14. Elif Oguz  
Lead Designer

15. Etienne Archard  
Market Analyst Phosphates

16. Grace Chilande  
Market Analyst Demand

17. Hanna Chtioui  
Phosphate and Potash Market Analyst

18. Jessica de Lafargue  
Conference Planner

19. José de Souza  
Programme Manager - Supply

20. Kate Ashby  
Conference Planner

21. Laura Cross  
Director, Market Intelligence

22. Lucia Castillo-Nieto  
Technical Manager

23. Margot Clifford  
Senior Analyst Public Affairs

24. Patrick Heffer  
Deputy Director General

25. Sally Ekanayaka  
Communications Manager

26. Sandie Bouttemy  
Conference Planner

27. Stéphane Leleu  
Director, Events

28. Sylvain Riviere  
Senior Accountant

29. Sylvie Monnier  
Project Coordinator

30. Taha Abdelmoula  
Data Engineer

31. Volker Andresen  
Director, Sustainability and China Initiative Leader

32. Yvonne Harz-Pitre  
Director, Public Affairs

*As of 31 December 2023