AGTECH IRELAND

AGTECH IRELAND MANIFESTO FOR THE LOCAL AND EUROPEAN ELECTIONS – 7TH JUNE 2024

Enabling agtech to play its full part in Ireland's agriculture and farming sustainability

AgTech Ireland's Chairperson' Message

In the current election campaigns for local representatives and members of the European Parliament, it is important to remember how critical rural Ireland is to the social, economic, and public life of the country, as well as its environment.

Agriculture and farming, among other sectors, have tough, challenging climate and environmental obligations, which, uniquely, they are already hard at work to meet.

The last couple of years, with fundamental changes to the Nitrates legislation, concerns over the continuation of the Irish Nitrates derogation, new obligations on carbon emissions under the Climate Action Act and Plans, to say nothing of challenging weather conditions, have proven costly and aggravating for farmers.

Yet, the need to transition to more sustainable farming practices, including by adopting the many tools which our agtech industry is busy developing, has never been greater.

At local level, our key asks from County and City Council election candidates are that they would commit to ensuring that locally based agtech businesses can thrive and develop. This requires supportive planning measures, good access to power and telecommunication infrastructure, to finance, and local and national agency supports – such as LEO and EI.

In Brussels and Strasbourg, we need our future MEPs to ensure that the Common Agricultural Policy and other farm and agri-business support measures rely on science-based approaches. They must support our farmers and industry to modernise and improve efficiency in their use of resources, reducing their environmental footprint without damaging our European and global food security.

The forthcoming local and European elections are vital for rural Ireland, our farmers, our agrifood and agtech industries. We urge all candidates to engage with the issues we outline here in earnest. We remain available to discuss any of the aspects of this manifesto.

Padraig Hennessy

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Chairperson
AgTech Ireland

AgTech Ireland – Who are we?

AgTech Ireland is a not-for-profit industry representative group funded and led by members. We are governed by an Executive Council and have appointed Catherine Lascurettes as COO to drive our programme of action.

Our members are companies from every sector of agricultural technology and innovation, from infrastructure, hardware, digital and data management tools, machinery, automation, biotechnology, veterinary and phytosanitary products and supplements, information monitoring and data analysis. Our members include Irish and international companies, startups and established businesses alike.

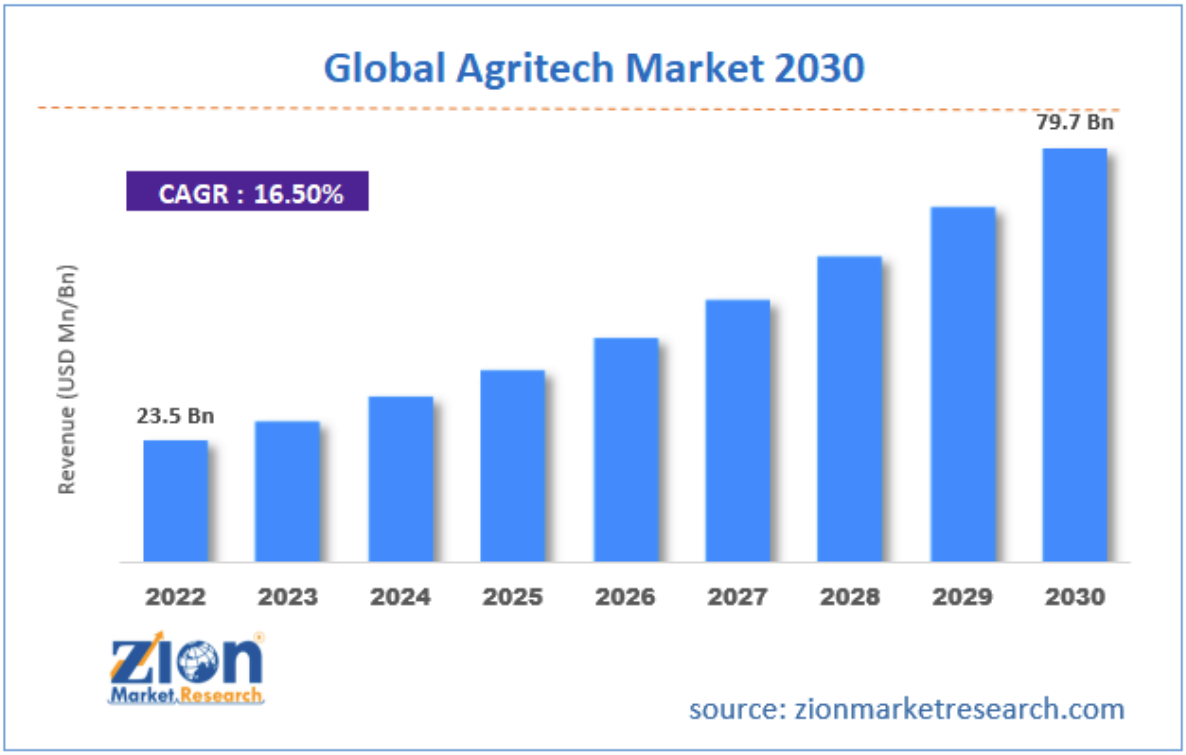
Our mission is to promote, support and enhance Ireland's agtech community, by connecting our members into a supportive ecosystem to create a network of agtech leaders in Ireland. We advocate and lobby for the sector, promote collaboration across industry, research and government departments and agencies. We help shape and communicate agtech in the context of sustainable agriculture. We aim to be the single point of contact for government, media, trade missions and research for our industry. We take good corporate governance extremely seriously and are fully registered with the Register of Lobbying.

What is agtech?

Agtech, short for agricultural technology, refers to the use of technology and innovation to enhance various aspects of agriculture. It encompasses a wide range of technologies, including precision farming, sensors, robotics, data analytics, artificial intelligence, and biotechnology. Agtech aims to improve efficiency, sustainability, and productivity in agriculture, addressing key challenges such as food security, resource management, and climate and environmental sustainability.

The value of agtech

The global value of agtech in 2024 has been variously estimated at around USD$25-30bn, with expectations of spectacular CAGR growth of up to 16% to reach north of US$70bn by the early 2030's. While the growth projections are somewhat speculative, they are reported by various market analysts consistently between 14 and 16% CAGR and reflect the greater dependence on technology of agriculture as it transitions towards more sustainable and resource efficient ways of producing.



In Ireland, 2020 data gathered by Enterprise Ireland from 80 client companies shows 84% of established companies and 16% of startups. Irish agtech sales amount to around €1.1bn, of which 60% are generated through export. The sector is estimated to employ just short of 3000, with a strong rural economy footprint: 87% of the companies are based outside Dublin.

These figures are undoubtedly somewhat dated, as investment in agtech, the number of new startups, and the development by established companies of new agtech solutions has increased exponentially in the last few years.

Agtech: evolving solutions

Technological advances in farming have enabled a growing human population to feed, fuel and clothe itself. They constantly evolve to respond to new challenges.

Increased Productivity: Agtech solutions can significantly enhance agricultural productivity by optimizing resource use, improving crop yields, and reducing waste. This contributes to economic growth, food security and sustainability.

Resource Efficiency: Precision farming technologies enable farmers to optimise resource use, while reducing fertilizer and pesticide use. This reduces environmental impact and aligns with sustainable agricultural practices.

Data-Driven Decision Making: Agtech relies on data analytics to provide insights into crop performance, weather patterns, and market trends. This enables better decision making at farm level, more effective compliance with agricultural regulations, policies and support systems.

Rural Development: We have already shown that agtech companies are most prevalent in rural areas, where they play their part in stimulating economic development. Farmers with access to advanced technologies are empowered to modernise practices, increase income, and contribute to the rural economy.

Climate and Environmental Resilience: Agtech plays a crucial role in building climate-resilient, low environmental footprint agriculture. Technologies that monitor and predict weather patterns, reduce nutrient loss, coupled with crop varieties developed to withstand changing climate conditions, help to reduce agriculture's environmental impact.

Innovation and Competitiveness: Supporting Agtech encourages innovation within the agriculture sector, making it more competitive on a global scale. This is essential for Ireland's ambition as global leader in sustainable food production.

Job Creation: Agtech creates job opportunities in technology, research, and related fields. It can help make farms safer and more appealing workplaces with better work/life balance which attract a diversified and skilled workforce.

Global Leadership: By investing in Agtech, a country can enhance its trade relationships and contribute to addressing the global challenge of feeding a growing population sustainably.

Agtech supports agriculture's sustainability

The role of agtech is specifically recognised in Food Vision 2030 Mission 4 (An innovative, competitive and resilient agri-food sector, driven by technology and talent); but it also enables action relevant to all the other Missions in Food Vision 2030.

Here are a few examples.

Agtech solutions can help **reduce methane emissions** through slurry or feed additives, the latter delivered through grazing-system friendly, slow-release boluses, through the application of genetic and genomic selection, and through hardware-based technologies enabling capture and neutralisation of methane (for example, the Cargill ZELP "cow masks").

Reducing nutrient losses to water and reducing air pollution can also be substantially assisted by agtech solutions, such as Low Emissions Slurry Spreading systems, the use of protected urea, precision application of fertiliser using GPS driven machinery, and soil sampling and analysis.

Farm information monitoring and data analysis software such as those provided by homegrown Herdwatch in Tipperary, are probably farmers' most widely adopted form of agtech**.** They enable farmers to measure every aspect of the farm's performance through a smartphone app, analyse the information to reduce inputs, monitor and optimise animal, plant and soil health, meet regulatory obligations on animal or crop records, secure traceability and improve labour efficiency.

Automation is also playing a huge role in improving the social as well as economic sustainability of the farm. Automated structures like drafting gates, automated milking parlour such as manufactured by Dairymaster in Kerry or Pearson Milking Technology in Athy, and milking and feeding robots sold by Lely and others, can improve labour efficiency, comfort and help cope with labour shortages, also making the farm a safer, and more attractive workplace.

To **reduce AMR and reliance on anthelmintics, improve animal health, thrive and welfare**, agtech companies can already provide rapid testing kits for pathogens e.g. Micron Agritech in Dublin; others provide infection prediction tools that enable selective treatment to only the sick animals e.g. Cotter Agritech in Limerick. Others still supply mineral, probiotic or other feed/water supplements and additives, like TERRA NutriTECH in Athy, or Precision Microbes in Co. Dublin.

Agtech research and development companies like Germinal are bringing to market **more climate resilient, less fertiliser dependent** multispecies swards and forage crop seeds.

Biotech companies which develop new seeds and plant material also support **greater diversification and improvement in the profitability and sustainability of fruit, vegetable and other horticulture productions**, including organics production, not only in coherence with Food Vision 2030, but also with the National Strategy for Horticulture 2023-27. A good example here would be Beotanics in Kilkenny.

Enabling agtech to support Ireland's sustainable agri-economy

Given engagement by government departments and agencies, integration with research institutes and universities, and with the right type of policy supports and access to patient

finance, agtech can help achieve Ireland's climate and environmental obligations to 2030, 2050, and beyond.

Agtech companies will play a crucial part in speeding and scaling on-farm adoption of better farm practices and technologies to enable Irish agriculture to reduce its GHG emissions by 25% by 2030 and reach net zero by 2050. They will also help farmers reduce their use of fertiliser, pesticides, antimicrobials and anthelmintics, improve nutrient management to improve water quality, supporting the reversal of biodiversity loss.

A recent report by KPMG titled "Driving innovation and adding value though agri-tech" makes a number of recommendations for the Irish agtech sector as it concerns not only farming, but also food processing.

AgTech Ireland's Asks
from Local and European election candidates

To enable agtech to deliver its full potential for Irish agriculture and the Irish economy, we believe election candidates must commit to deliver on the points below:

- **<u>Transparency and coherence of policy on VAT refunds to unregistered farmers for certain types of on-farm investment.</u> Farmers must continue to be supported and have certainty in planning the financing of structural investment critical for sustainability improvements.**
    - While no amendment has been made to the relevant legislation (SI 201 of 2012), a significantly different approach has in recent times been taken by Revenue regarding the VAT 58 refund claims by non-VAT registered farmers (the vast majority). This has meant that critical on-farm fixtures, which were previously deemed eligible, have been rejected for VAT refunds.
    - As the TAMS grant is based on the price of equipment net of VAT, the inability of farmers to claim VAT on those items increases substantially the cost of investments essential to improving the sustainability of their farms, throwing farmers' financial planning into disarray.
    - Those combined cost implications have resulted in order cancellations by farmers to agricultural equipment, machinery and other agtech manufacturing and installation companies.
    - Cancelling or delaying investments to replace energy inefficient and potentially higher emission equipment is retrograde from an Irish agricultural sustainability policy perspective.
    - From an agtech economic and employment perspective, this is putting pressure on rural jobs as order cancellations for certain equipment mount up.
    - This new interpretation of long-standing rules by Revenue runs counter government policy on agriculture, and it will cost rural jobs.
    - **Local and European election candidates must insist on coherence in national and European policy around supporting sustainability enhancing farm practices and investments, and on clarity on national VAT provisions for non-registered farmers.**

- **<u>Improving operational efficiency of the new TAMS rollout</u>.**
    - A new CAP understandably creates operational challenges for DAFM, but nearly 18 months on from its start, it is crucial that delays in rolling out tranches and approving on-farm investments be minimised as they can result in serious cash flow issues for farmers and agtech companies alike.
    - Speed of decision is also important to ensure investments can be made/structures erected at the optimal time in the farming calendar.
    - **Local and European election candidates must press for improved efficiency in the running of TAMS.**
- **<u>Developing a pathway for inclusion of agtech innovations in TAMS, ACRES and other CAP Schemes.</u>**
    - Innovations can be difficult to include in schemes which rely on pre-determined lists of eligible items.
    - A pathway must be developed, in collaboration with the agtech sector, which allows for ongoing review of the TAMS and other schemes' eligibility considerations for new, but proven and validated solutions shown to meet the objectives of the scheme.
- **<u>Considering other types of incentive schemes to encourage on-farm adoption of tech which helps reduce emissions</u>**
    - For example, through the use of feed or slurry additives.
    - **Local and European election candidates must insist that innovation in agriculture be fostered through greater openness to new, proven products in existing or new incentive schemes.**
- **<u>Developing agreed validation protocols with state agencies and other institutions</u>**
    - For agtech innovators, having their product or service validated by recognised authorities trusted by farmers is critical to commercial success, which in turn is critical to wider adoption of sustainability enhancing new technologies.
    - While some agtech companies have been able to work in this space with universities, organisations like Teagasc is where validation needs to come from to secure farmers' trust.
    - AgTech Ireland is engaging with Teagasc to enhance collaboration between the two for validation of product and services.

- **Local and European election candidates must show their commitment to science-based solutions and campaign to ensure departments and agencies involved with the agtech sector are forthcoming with quality validation processes.**

- **Taxation of R&D investment by agtech operators**
  - In coherence with Food Vision 2030, the tax treatment of investment by agtech companies in research and development for products and services which can support sustainability goals at farm level must be reviewed and optimised.
  - **Local and European election candidates must help foster a supportive taxation framework to encourage investment by agtech startups and established companies alike.**

- **Including marginal agricultural sectors in support policies and schemes**
  - Because of their prevalence in Irish agriculture and export values, livestock sectors, especially beef, dairy and sheep, and to a lesser extent tillage, understandably dominate the focus of policy.
  - Agtech products and services directed to more marginal sectors -for example fruit and vegetable growing, ornamental horticulture, poultry and others - which are sectors vital to the diversification aims of both Food Vision 2030 and the National Horticultural Strategy, must be included in supportive policies and schemes.
  - **Local and European election candidates must realise the importance of agtech solutions being developed for those sectors, and champion them at**

- **Accessing venture capital/start up finance/other financial and business supports**
  - Investors, private equity firms and venture capital funds often have insufficient understanding of the relatively slow dynamic of tech adoption in agriculture and can be impatient on returns and less supportive than agtech startups require.
  - Incubation programmes such as UCD AgTech's Agccelerator have helped start ups grapple with business issues, providing mentoring, training around business development skills, investor readiness, branding and PR, on-farm testing etc. More of those programmes need to be strongly resourced, and to uncover and support high potential startups in the sector.
  - ISIF and EI involvement is critical in educating investors and supporting startups and established companies optimise their impact on Irish agricultural

sustainability, but also their value to the economy, especially when it comes to accessing global markets and increasing export revenue.

- While job creation is an important consideration, it is not the only determinant of value creation. EI and other agencies/government departments missioned with supporting the sector must take into account the full value creation potential of agtech companies, as well as their undoubted importance to securing necessary increased adoption of sustainable practices and technologies by Irish agriculture.
- **Local and European election candidates must recognise the value to their local region and country of a thriving, well financed agtech sector, and help foster adapted incubation programmes with business and mentoring supports, and funding opportunities.**

Conclusion

While government policy is not within their immediate responsibility, local and European election candidates have important platforms they can utilise to articulate the importance of transitioning agriculture to production systems which can be more productive, more resource efficient, and have a smaller footprint. This requires facilitating and supporting the continuing development of technologies by agtech innovators to keep up with economic, social and environmental challenges encountered by agriculture. It also requires ensuring ready access to technical and financial supports for rapid innovative technology adoption by farmers.

To help deliver the mandated 25% cut in greenhouse gas emissions the agricultural sector must achieve by 2030, farmers, many of whom have already made significant progress, must continue to adopt at speed and at scale both new farming practices and new technologies.

A vibrant, well supported Irish agtech sector will be instrumental in this: it offers a pathway to address pressing agricultural challenges, promote sustainability, boost economic growth, and position a country as a leader in the global agricultural landscape.

CL/AgTech Ireland – May 2024