



AGTECH
IRELAND

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

**AGTECH IRELAND
PRE-BUDGET 2025 SUBMISSION**



AgTech Ireland's Chairperson's Message

When framing the Budget for 2025, it is important for our government and our opposition politicians alike 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 have seen 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, topped by challenging weather conditions, and this has proven both costly and wearing for farmers' livelihoods and mental health.

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.

It is crucial that farmers would receive continued and strengthened financial and technical supports through CAP and national funds to promote transition to better practices and technology adoption. However, it is equally important that conditions are optimised for agtech businesses which can substantially support this transition to thrive and develop.

This requires supportive planning measures and taxation, good access to high quality power and telecommunication infrastructure, to patient finance, to independent scientific validation of technology and local and national agency supports – such as LEO, EI and ISIF.

The forthcoming Budget must be used to fund infrastructure supporting the agricultural and agtech ecosystems to enable Ireland to achieve its climate and environmental obligations. We urge our government parties, as well as opposition politicians, to engage with the issues we outline here in earnest. We remain available to discuss any of the aspects of this submission.

Padraig Hennessy





Padraig Hennessy
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.



Catherine Lascurettes
COO
Agri-policy Consultant & Exec at Nuffield Ireland

Our Executive Council



Padraig Hennessy
Chairperson
CEO of Terra NutriTECH
Animal nutrition



David Leydon
Secretary
Head of Food & AgriBusiness at ifac
Professional Services



Lloyd Pearson
Treasurer
MD of Pearson Milking
Technology
Dairy technology



Deirdre O'Shea
Council Member
Food, Agribusiness & Beverage Leader at AON
Professional Services



James Greevy
Council Member
Head of Product at Herdwatch
Farm Management App



Ursula Kelly
Council Member
Managing Director of Cormac Tagging
Animal Identification



William Minchin
Council Member
CEO of Agricultural Trust
Agri Media



Sean Smith
Council Member
Commercial Director at Micron Agritech
Animal Health Start-up

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?

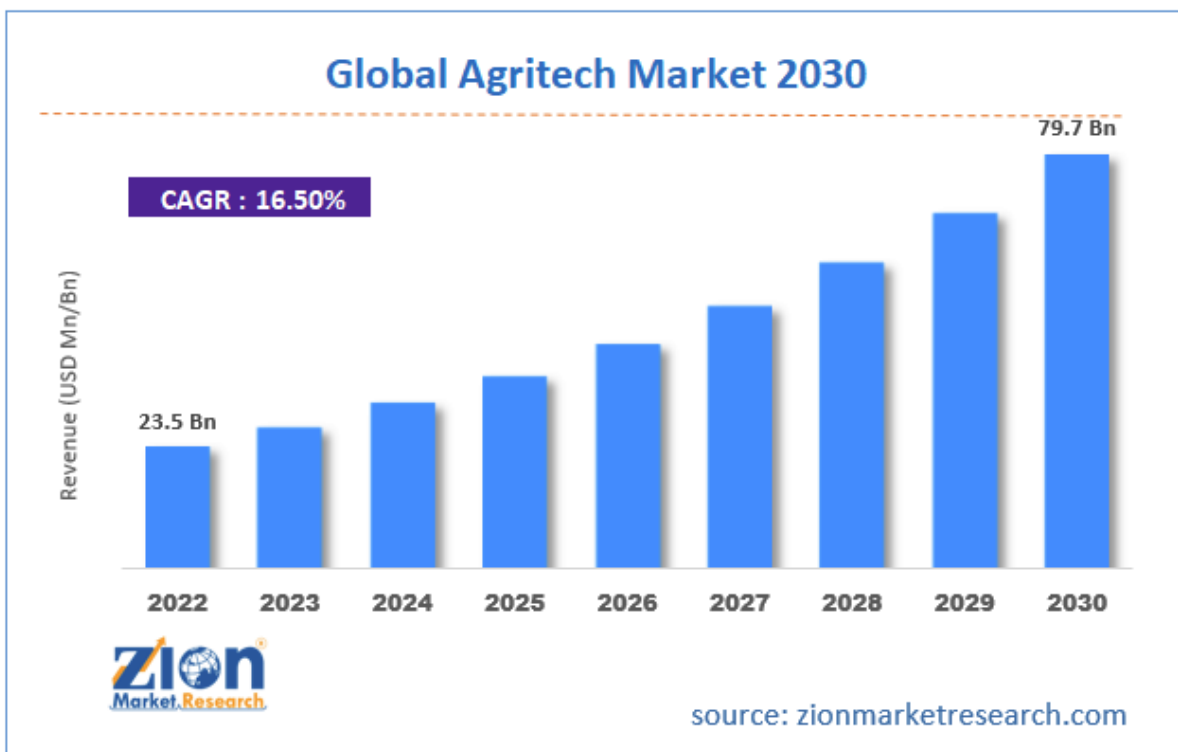
Agtech, short for agricultural technology, refers to the use of technology and innovation to enhance various aspects of agriculture. It encompasses a wide range of technologies, including



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

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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 through 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 government in Budget 2025

To enable agtech to deliver its full potential for Irish agriculture and the Irish economy, we believe Budget 2025 must deliver on the points below:

- **Transparency and coherence of policy on VAT refunds to unregistered farmers for certain types of on-farm investment. 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.
 - **Budget 2025 must support sustainability enhancing farm practices and investments and help provide full clarity on national VAT provisions for non-registered farmers.**
- **Improving operational efficiency, funding and cost assessments under TAMS 3.**

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- The Targeted Agricultural Modernisation Scheme (TAMS) plays a key role in supporting farmers in adopting sustainability-enhancing technologies and practices. It is essential that it would be optimally funded and efficiently operated to support the speed and scale of necessary on-farm transition.
- A new CAP understandably creates operational challenges, and it is encouraging that some of the delays the administration of TAMS by the Department of Agriculture has been plagued with in the last two years are being reduced. It is crucial that tranches be rolled out and applications approved in a timely fashion to avoid 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.
- The costings used to assess applications have not kept pace with significant materials, labour and other cost inflation. It is essential that these be reviewed systematically ahead of each tranche to reflect current realities.
- The budget available for TAMS must be reviewed upwards to ensure sufficient funds for the high number of necessary investments.
- The eligibility list which understandably focuses on sustainability, farm safety and animal welfare-related investments, should be critically reviewed on an ongoing basis to include additional equipment, among which animal handling technologies, certain forms of LESS spreading equipment, slurry storage, etc.
- Finally, in recognition of the fact that some sustainability-enhancing investments – e.g. LESS equipment, imported slurry storage - are out of reach of smaller farmers' budgets, TAMS should be open to joint investments by a few neighbouring farmers.
- **Budget 2025 needs to prioritise higher levels of national funding to complement TAMS and support the faster adoption of sustainability-enhancing technologies on farms.**
- **Considering other types of incentive schemes to encourage on-farm adoption of technologies which helps reduce emissions**
 - For example, through the use of feed or slurry additives.
 - **Budget 2025 must help support research, extension and incentivisation of those types of technologies to help deliver Ireland's carbon emission reduction obligations.**
- **Supporting validation protocols with state agencies and other institutions**



- 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.
- AgTech Ireland has been engaging with Teagasc to enhance collaboration between the two for validation of product and services and has also engaged with universities – especially UCD – and community organisations such as the Dingle Hub.
- **Budget 2025 must provide supports for science-based solutions and help 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.
 - Taxation generally, and VAT rates for different products, must also reflect joined up thinking in government policy.
 - For example, it is currently the case that VAT on oral antibiotics for livestock is set at 0%, but VAT on non-oral vaccines – which in some cases would remove the need to use antibiotics at a later stage – is set at the standard rate. In this case, zero-rating non-oral vaccines would be coherent with the need to reduce the risk of antimicrobial resistance (AMR).
 - **Budget 2025 must foster a supportive taxation framework to encourage investment by agtech startups and established companies alike. It must also facilitate reviews of taxation where this could improve policy coherence around sustainability in agriculture.**
- **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 and other supports.
 - 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.

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- **Budget 2025 must provide resources which reflect and support the importance to diversification of Irish agriculture of those sectors.**
- **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 technology adoption in agriculture and can be impatient on returns and less supportive than agtech startups require.
 - Incubation programmes such as UCD AgTech’s Agccelerator, and their new FAST IP programme are helping some 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 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.
 - **Budget 2025 must ensure that adequate funding is made available to government agencies and education institutions to support a thriving, well financed agtech sector, and help foster adapted incubation programmes with business and mentoring supports, which also include funding opportunities.**

Conclusion

Each year, our national Budget seeks to reflect our government’s policy priorities for the forthcoming fiscal year. When it comes to agriculture, those priorities feature front and centre improved economic, social and environmental sustainability, reduced GHG emissions, improved water quality and biodiversity restoration.



Our climate obligations' first major deadline is 2030, and the focus of Budget 2025 and following budgets must increase in that space, with higher, focused financial commitments to support all that will help deliver on our mandated agricultural emission reductions.

To meet the 25% cut in greenhouse gas emissions the agricultural sector must achieve by 2030, farmers must continue to adopt at speed and at scale both new farming practices and new technologies.

AgTech Ireland fully expects Budget 2025 to support a vibrant Irish agtech sector which will be instrumental in delivering the necessary transition on farms.

Our sector offers a pathway to address pressing agricultural challenges, promote sustainability, boost economic growth, and position the country as a leader in the global agricultural and agtech landscape.

CL/AgTech Ireland – August 2024