



## No room for the Green's blind prejudice in Scotland's gene editing debate

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**As England and the EU follow other countries around the world to free up the use of gene editing in agriculture, will the Scottish Government maintain its obstinate and unscientific opposition to technologies which can improve productivity and help farmers produce safer, healthier food more sustainably in a changing climate? Faced with the prospect of a cut in direct support payments and an increase in production-limiting climate and biodiversity conditions, will Scotland's farmers and crofters still be asked to compete with one hand tied behind their backs, asks the Scottish Conservative's Shadow Cabinet Secretary for Rural Affairs, Rachael Hamilton MSP.**

In recent months, the pace of global policy developments in relation to gene editing has often been hard to keep up with. Together, the Covid pandemic, war in Ukraine, and the increasing frequency with which extreme weather events are disrupting the food system have brought a heightened recognition among policymakers of the need to embrace scientific innovation in agriculture and food production.

The urgency of international policy action in this area is reflected in the recently published [OECD-FAO Agricultural Outlook 2023-32](#), which states that: “*Surges in agricultural input prices experienced over the last two years have raised concerns about global food security. Investments in innovation, further productivity gains and reductions in the carbon intensity of production are needed to lay the foundation for long-term food security, affordability and sustainability.*”

Earlier in the year, FAO also released a significant [technical report](#) confirming that the possible effects of gene editing on food safety, quality and trade are expected to be similar to foods derived from pre-existing conventional breeding techniques. This reinforced previous scientific opinions from leading regulatory authorities such as [Health Canada](#) and the [European Food Safety Authority](#) (EFSA), which both confirm that the products of gene editing technologies pose no new or additional risks compared to their conventionally bred counterparts.

That's precisely why Governments around the world are moving rapidly to embrace these new genetic technologies, recognising their potential to accelerate the development of crops and livestock which can support greater climate resilience and productivity, more efficient use of natural resources and reduced impact on the environment.

Indeed, that is why I recently launched a [paper](#) which, among other food production policies, includes plans to enable food producers to introduce this technology in Scotland.

Within the past few months alone, England has [passed](#) the Genetic Technology (Precision Breeding) Act 2023, removing gene edited (GE) plants and animals from restrictive GMO rules, the Canadian authorities have [confirmed](#) that GE plant products will be treated as conventionally bred, and the EU Commission has published [proposals](#) to regulate GE crops in the same way as conventional plant varieties and seeds, with no separate requirements for food safety or environmental risk assessment, statutory labelling, traceability or co-existence.

Other countries, including Japan, Australia, Brazil, Argentina and the USA, have already adopted similar regulatory positions to encourage the use of gene editing techniques.

At the same time, New Zealand looks set to shift its position on gene editing and GMOs, after the opposition National Party [announced](#) a pre-election manifesto commitment to reverse the country's long-standing ban on such techniques, saying the policy is economically damaging and making it harder to reach climate change goals.

Similarly, an expert committee advising the Norwegian Government has concluded that current regulation of gene editing in Norway is disproportionately high, calling for products that are comparable to conventionally bred products to be regulated as such. The committee's chair, Anna Wargelius, [said](#) that it is now "*... more risky to maintain a strict regulation than to soften it*", in view of the opportunities to help address future challenges related to food production, climate change and health.

Interestingly, the Norwegian government also recently [approved](#) a high Omega-3 genetically modified rapeseed oil for use in aquaculture feed, as a renewable, plant-based source of the oils salmon (and humans) need for health and welfare, supplies of which are currently mostly dependent on overstretched marine sources.

Norway is the largest salmon farming country in the world. It is also a country which prides itself on its environmental credentials, as a world leader in the use of renewable energy, green technologies, and sustainable management of natural resources.

Given the pressure on marine fish stocks currently used to produce aquaculture feed, this GM rapeseed oil is unquestionably a greener, more sustainable alternative.

It is also a healthier option. As plant scientist Professor Johnathan Napier [pointed out](#) recently, continued growth in the global salmon farming industry means finite

supplies of fish oils have been diluted with normal vegetable oils, so halving levels of health-giving Omega-3s in the final product.

Scotland's £1.8bn salmon farming industry is now our leading food exporter, and with ambitious plans to double output by 2030, the significance of the aquaculture sector to jobs, growth and export earnings in Scotland's rural economy cannot be over-stated. Does the Scottish Government continue to reject GMO applications such as this when it is unquestionably a more sustainable option, and one which can also improve the healthy-eating profile of farmed salmon?

The SNP/Green Government's continued opposition to gene editing is bewildering, particularly when Scotland is recognised as a global leader in agricultural science, and is pioneering advances in these technologies through centres of research excellence such as the Roslin and James Hutton Institutes.

Until now, the two reasons most frequently cited by the Scottish Government for its rejection of gene editing are that it could damage the clean, green image of Scottish food and drink, and that ScotGov prefers to remain aligned with the European Union.

Following the recent publication of the EU's plans to relax restrictions on gene edited crops, with the accompanying narrative that Europe would struggle to meet its Green Deal ambitions for agriculture without access to these technologies, both arguments now lie in tatters.

Indeed, the EU's Joint Research Centre [published](#) two parallel reports at the same time describing case studies of how crops developed through gene editing could help reduce the use of pesticides. The case studies cover scab resistant apples, capable of reducing fungicide use by up to 58%, and blight-resistant potatoes which could reduce fungicide applications by up to 80% under commercial conditions.

But logic or reasoned argument would appear to carry little sway when it comes to the grubby politics of power-sharing in Holyrood.

In a recent column for [The Times](#), Alex Massie accused the Scottish Green Party of putting doctrine before progress after their rural affairs spokeswoman, Ariane Burgess, described gene editing as "*genetic modification through the back door,*" adding that "*many of us hoped that we had stopped this kind of meddling with nature long ago.*"

Faced with ill-informed prejudice such as this, the Bute House agreement between the SNP and the Greens may come to be sorely tested as the Scottish Government comes under increasing pressure to review its policy position on gene editing.

As the debate continues over the direction of Scotland's farm policy, I share Scottish farmers' frustration at the lack of detail regarding future farm support payments, and what conditions will be applied. But primary producers in Scotland certainly face the prospect of a reduction in direct payments, alongside a requirement to adopt costly and (potentially) production-limiting climate and biodiversity measures.

In the light of recent policy developments on gene editing in agriculture elsewhere, will Scotland's farmers and crofters still be asked to compete with one hand tied behind their backs?

Will the politics of prejudice continue to block access to technologies which could help maintain the productivity, profitability and sustainability of their farming operations?

I do hope not, but with this obstinate and visionless administration you just never know.

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