



Growing Media Ireland

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Submission

by

Growing Media Ireland Company Limited by

Guarantee

re

Public Consultation on a

Review of the use of Peat in the Horticultural

Industry

Growing Media Ireland

Background

Growing Media Ireland involves the majority of commercial horticultural peat producers in Ireland, large and small, (excluding Bord na Móna) in a grouping which aims to contribute to the socio-economic development of rural communities and regions throughout Ireland where peat harvesting and substrate production plays an important role.

Growing Media Ireland represents companies which are committed to best environmental practice in peat harvesting and the responsible use of peat for both professional horticulture and the retail market.

Growing Media Ireland members make a significant contribution to the economy, particularly in the midlands. A recent survey carried out on our behalf by Grant Thornton, Chartered Accountants, highlights that this sector in Ireland currently supports the employment of almost 11,000 people nationally, directly and indirectly in primary production, processing, marketing, transport and other downstream activities. Total industry turnover has been estimated at €437m, with exports accounting for 55%. The majority of the jobs are located in the midland counties of Laois, Offaly, Westmeath, Kildare, Roscommon and Longford, areas which are already employment blackspots and already have enough major challenges in the months ahead with Brexit looming.

Growing Media Ireland supports the overall aims of this review. However, we wish to highlight the need for proper consideration of the alternatives to peat, their GHG emissions, their availability in sufficient quantities, their suitability for use and health risks etc.

Horticultural Peatlands - CO2 Emissions and Rehabilitation

There is currently less than 5,500 ha of peatlands harvested for the production of peat for horticulture. Peatlands that are drained, cut over or cut away emit 6 tonnes of CO₂ per hectare per year (Derivation of greenhouse gas emission factors for peatlands managed for extraction in the Republic of Ireland and the United Kingdom, Wilson et al 2015 and Wilson 2019/ <https://www.oireachtas.ie/en/oireachtas-tv/video-archive/committees/2933/>).

The 5,500ha will emit 33,000 tonnes CO₂ or **0.055% of total projected emissions for Ireland in 2020.**

In real terms this represents the same emissions as from a population growth of less than 3,000 people per annum - the average person in the EU emits 11 tonnes (US 16.2 tonnes) of CO₂ per year (An Taisce /www.greenhome.ie/Energy/Carbon-Footprint) or the annual usage of less than 2,200 family saloon cars.

Based on this fact alone it would appear unjustifiable that horticultural peat production should be forced to shut down. In fact, such action would be more likely to exacerbate the

CO2 emissions equation due to the necessity to replace peat with expensive CO2 rich substitutes.

The statistics provided, show that there are 682,380 ha of cut over or cut away peatlands in Ireland. A robust plan for the rewetting of these areas combined with the right incentives (grants, carbon credits etc) represents a huge opportunity for Ireland to make significant inroads in its GHG emissions balance sheet. These abandoned peatlands present an opportunity that is unique and priceless.

In a paper entitled "Abandoned Peatlands" written by Mr Donal Clarke, a member of the International Peat Society Executive Board and a highly experienced authority on the peat industry in Ireland, he quotes as follows:

"In all the lobbying to stop peat production I have not heard anyone addressing the issue that the sudden ceasing of peat production leaves large drained peatlands emitting carbon dioxide. If companies lose their income, they will have no funds to rehabilitate these peatlands. Rehabilitation of peatlands is expensive, and rehabilitation to being carbon neutral or to a positive carbon balance is very expensive.

A nuanced approach considers the environmental, social and economic values of peatlands in a holistic way. Environmental is not just about stopping peat production now. It is about planning for the long-term carbon futures of these areas."

Parallel to the views expressed by Donal Clarke, Professor John Feehan, one of Ireland's foremost authorities on the bog lands of Ireland and the author of many publications on this subject, is clearly of the view that where harvesting is already in progress on areas of bog land, the optimum course of action now should be to allow this to continue to a point where approximately a half metre depth of peat is left. In his publication, "A Long-Lived Wilderness" he states, inter alia, "where a greater depth of peat remains the flora and fauna will be more impoverished. This is why it is undesirable that the horticultural peat industry should cease operations at one time when many areas have a substantial depth of peat remaining."

"The abandoned cutaway presents us with an opportunity that is unique and priceless: truly unique because it is once off and will not be repeated. We need to make our mind up now if we want to realise this opportunity."

Horticultural Peat and Food

Currently there is not sufficient supplies of good quality reliable alternative growing media that could replace peat in the food chain. Unless good quality alternatives are developed very soon the move away from peat will have dramatic consequences for world food supplies as Substrates are the backbone of soilless growing globally and peat is the key ingredient in the majority of these substrates. There is an increasing demand for substrates worldwide. Growing Media Europe estimate that demand will reach 244 million cubic metres by 2050 (from 57 million cubic metres today). It is expected that responsibly sourced peat will play a major role in meeting some of this demand. This demand is directly linked to the need for efficiently produced protein and nutrient rich plant-based food for a growing world population.

A What are your views on what more could be done to support and enable the switch to peat free horticulture at professional crop production level and consumer level?

Response;

What are the alternatives, ??

The volume of growing media used in the EU in 2018 was 55 – 57 million cubic metres, peat amounted to 40 million cubic metres, (70%+) - figures supplied by Growing Media Europe. It is clear from these figures that it will take a considerable number of years to have sufficient quantities of alternative materials in the market place to fully replace peat. The members of GMI continue to invest substantial sums of money in the research and development of peat free materials.

Peat free or peat reduced substrates cost substantially more than peat-based products and have added production risks, such as lower yields and less consistent crops etc. The increased cost is due to competition, for the raw materials, from other industry sectors such as power generation for bark and wood fibre. Power generation is a subsidised industry so has vastly greater buying power than the horticultural industry. Over the past 25 years a vast amount of money has been spent by the horticultural industry in researching and testing a huge range of alternative material, no one material has been found to satisfactorily replace peat for all crops.

B. What are your views on alternatives to the use of peat in the Horticultural Industry (from, for example, the perspective of the professional grower or consumer/amateur gardener)?

Response.

There is a lack of proven viable alternatives in the market place. For most growers, peat remains the raw material of choice due to its technical and commercial efficiency as well as its reliable security, which so far is unmatched by any other alternative constituent tested in the past.

Green Waste is often singled out as an alternative to using peat. Good quality Green Waste is a useful *diluent* to assist in peat-reduction; it is not a full alternative.

Unless there is full quality control and traceability of the source of material used in the production of green waste compost it is unsuitable for use in professional horticulture. For example, material coming from municipal waste collection centres in Ireland and the UK are frequently contaminated with chemical, herbicide and pesticide residues, glass, needles, faeces, plastic, etc. The problems associated with green waste is clearly highlighted by research carried out in the UK on behalf of HTA showing an almost total collapse in the use of green waste in the professional horticultural market. During a five-year period to 2016, the volume dropped from 22,000 cubic metres to 1,000 cubic metres per annum.

Coir is an excellent raw material for certain plants, however, there is limited availability and un-reliability of supplies. It has negative environmental consequences - large water

requirement in areas of India and Sri Lanka where water is already in short supply, issues from waste water, significant transport costs, nutrient depletion where coconuts are grown, pollution from chemicals used in the washing and buffering, etc.. Although coir has its own environmental baggage, it has at least the advantage that it can be used as an expensive alternative to peat for many crops; the same cannot be said for Green Waste.

Woodfibre in particular has proven its worth as a very important diluent for growing media due to its chemical, physical and biological characteristics. It is widely used in the hobby market sector. The demand from the energy sector is pushing up the price and limiting the availability of wood chips, with that said Woodfibre is unfortunately not a suitable blending material for the mushroom/casing soil sector

Perlite, Vermiculite, Rockwool, Clay and Sand are also used in the production of substrates but again they all come with environmental, geographic and/or commercial challenges. When locally sourced peat is replaced with any of the above the outcome may be negative for the environment.

Peat alternatives are suitable for a lot of growing, certainly for hobby/retail products. However, they are not available in the quantities/quality required to meet a rising global demand. There are also serious concerns over the environmental credentials of the majority of the alternative materials being used, especially transport over long distances, use of scarce water resources, chemicals used in processing etc.

It is strongly recommended that a system similar to that in use in the UK and known as the 'Responsible Sourcing Calculator', which allows for the materials to be fully audited and benchmarked against any other material as the calculator assess all materials against the same set of criteria. The use of the calculator is strongly recommended to all manufacturers and suppliers for the future assessment of materials.

C What are your views on whether Ireland should cut back or cease the export of peat for use outside of Ireland even if this would result in job losses in Ireland?

Response

An export market, is vital for the survival of the horticultural peat industry in Ireland as the demand from the Irish market would not justify the continued costs associated with production. The shutdown of the industry would result in the loss of exports to the value of €239m and the loss of over 11,000 jobs. The extra costs involved in importing raw materials, including peat and substrates would make the majority of Irish nursery growers uncompetitive and they would no longer be able to compete in both the domestic and export market place.

Such action will result in higher environmental costs as peat production will only move from Ireland to another more distant location resulting in Irish growers adding much higher transport costs.

It must be pointed out that horticultural peat is only being harvested from already working sites. No new sites have been opened for many years.

A sudden ceasing of peat production leaves large drained peatlands emitting carbon dioxide. If companies lose their income, they will have no funds to rehabilitate these peatlands. Rehabilitation of peatlands is expensive, and rehabilitation to being carbon neutral or to a positive carbon balance is very expensive. All horticultural peat harvesting companies are committed to the rehabilitation of its drained industrial peatlands but with such large areas becoming rapidly abandoned it is difficult to see this other than a long-term exercise.

This sudden enforced shutdown of the horticultural peat industry and the subsequent loss of jobs is clearly an “unjust transition”. This is clearly at variance with other EU countries where a medium to long term transition was allowed. In Germany, one of the world’s biggest consumers of coal, a 19-year period was allowed for the complete shut-down of the power stations. Finland, one of the world’s largest producers of peat, allowed a ten-year period to reduce the production of peat by 50% and also to phase out the use of coal by the 1st May 2029.

As a small open economy, we need to ensure that we can participate in this global market

D Do you consider that a working group should be established to advise on how best to overcome the barriers to reducing peat use in professional horticultural crop production and in the amateur horticultural market?

Response

Yes, there is a lack of knowledge about alternatives to peat, particularly in their carbon foot print, performance levels, cost of the materials and the resultant increase in cost of the food, flowers etc.

At present, it appears that once a material is not peat it must be good – which most definitely is not the case.

E If you are in favour of the establishment of a working group, which stakeholder groups do you think should be represented on it?

Response

Growers, Substrate Manufacturers, Retailers, NGO’s, Research Bodies, Peat Producers (including representatives from GMI and Bord na Mona), relevant Government Departments, Just Transition Commissioner.

F How do you think that those involved in harvesting peat for horticulture could be compensated for any loss arising from a cessation of this activity (for example, on the basis of the profit loss arising or related to the value in ecosystem services retained/provided)?

Response

No compensation will be required if producers are allowed continue to harvest the peat from their existing working areas and put in place restoration plans.

However, if there is a forced shut down then the recently announced Just Transition Fund should be used to compensate the producers as well as the employees. Compensation could be based on past profits and also related to the future potential of the remaining unused resource either as a peat source or perhaps for example as a wind or solar farm.

It is most likely that without a local supply of peat-based substrates the Horticultural Industry would become uneconomic so a compensation package would be required more widely than just for the peat harvesting sector.

G How do you think that those involved in harvesting peat for horticulture could be guided towards alternative activities, for example, developing an environmentally suitable alternative material that could replace peat in professional horticultural crop production?

Response

The reality is that the majority of the current production facilities will close once peat production is stopped, this of course will result in the loss of employment. Most of the alternative materials (coir, green waste, perlite, vermiculite, rockwool, and horticultural clay) are not available in the midlands. It would be illogical, both from a financial position and an environmental position to commence transporting these bulky raw materials to these often, isolated locations to produce substrates and then transport them to the markets.

One alternative that is "location specific" is "sphagnum farming", however much more research and development is required to bring this to a commercial level. More research is needed on crop selection, ground preparation, processing and harvesting technology and yield management. The midlands are ideally suited for further research, trials and development of "sphagnum farming".

A robust, well-funded programme for the regeneration and subsequent maintenance of the existing 682,380 ha of cutover and cutaway peat lands would create substantial employment opportunities. The employees already have the skill set for this work.

H What do you consider the value of peatlands to be to (please score out of 100):

Carbon Storage	20
Nature Conservation	20
The provision of ecosystem services	15
The Economy	20
Social and Cultural Needs	25

I In your opinion should the use of peat within (i) the amateur horticultural market and (ii) the professional horticultural industry be phased out over the next 3, 5, 10, 15 or 20 years and if so, how should this be done bearing in mind the potential job losses and the difficulties with alternative growing media?

Response

Realistically a 10-year time frame is required to completely replace peat from all sectors of the hobby market. This of course depends on getting sufficient quantities of good quality, safe alternatives. The time frame for the professional market will be much longer. and it will be a very gradual transition. the objective of peat-free growing media should be restated to that of achieving sustainable growing media. Achieving peat-free professional growing media even in the medium term is unrealistic, it will introduce too many commercial and technical risks for growers; peat reduction of 25% to 50% should be the initial focus in the next ten to fifteen years. This would achieve the objective of reducing peat use while maintaining the supply of reliable growing media for professional nurseries.

If growers and retailers are forced to use substandard peat-free growing media before they are ready this could lead to a loss of shelf life (higher losses of plants in the garden centre due to poor water holding capacity) then this is not very environmentally friendly. Much more research is required to fully understand the dangers of using materials from waste streams, the increased risk of dangerous pathogens (salmonella, e-coli, fungi etc.) in growing media, growers and manufactures could be exposed to liabilities and consumers could be exposed to unnecessary risks and will refuse to purchase the products. Poor quality products will damage the market and slow down the transition.

J Does more need to be done to educate and build consumer awareness of peat free products which are available at retail level?

Response

Yes, there is certainly a need for further education/ information around the whole industry. Customers should be aware that most alternatives come at an environmental cost. To this end a Full Life Cycle Analysis calculation of each product would be helpful to compare the costs and benefits of other constituents in terms of sustainability, carbon footprint, ethical standards etc. to ensure consumers and growers are aware that alternative materials also come at an environmental cost. Growing Media Europe is currently undertaking such a study.

In the UK, DEFRA and the Growing Media Association have developed a calculator to help evaluate the sustainability of different types of growing media on a like for like basis which should promote peat reduced and strongly peat reduced growing media. Even with this calculator, a blend of different material will need to be used due to technical and commercial reasons.

Customers in the main, (both professional and amateur), want to know that the product they purchased will successfully grow their plants and that the producer has considered the environmental impact of the product they purchase.

Growing Media Ireland Company Limited by Guarantee

Directors;

Company

30th January 2020