

THE HEMP REPORT

Overview & Extracts

*In Response to Evidence Presented to the Irish Oireachtas by the
Intergovernmental Panel on Climate Change*

The Hemp Report

Overview

Under Irish legislation all varieties of cannabis, including industrial hemp, are treated as a controlled substance. Although industrial hemp is an agricultural crop with no narcotic value it remains subject to restrictive licencing laws. These laws constructively limit the growth of the Irish hemp industry by restricting access to state supports. Insufficient technological capabilities and over-restrictive regulatory requirements limit the Irish hemp industry's capacity to benefit the environment. They fuel negative public perceptions and reveal themselves as constructive obstacles to a full realisation of hemp's environmental potential.

The nutritional food value of hemp, its soil-carbon sequestration properties and low energy requirements mean that hemp comprehensively fits the profile for IPCC "transition pathways that carry the highest co-benefits - including for human health." In acknowledgement of these and other potentials, the UN is expected to amend its cannabis directive in early 2019, in order to encourage Member States towards "more innovative policy and market perspectives". The new UN directive will substantially reflect the terms of reference and the recommendations of the IPCC Report (2018).

Projected growth figures for the European hemp industry forecast an upper market value in excess of €55b by 2028. Canadian private interests put the 2028 European market value at €115b. With more than double the population of the US and Canada combined, the EU economy generates an annual GDP in the region of €15t. Europe is therefore, potentially, the largest market for industrial hemp products in the world. Rapid expansion in the global hemp sector has not followed sustainable transition pathways, therefore, enormous climate mitigation potential, as well as the co-benefits of integrated development, have been lost.

Our research demonstrates that a real but time-bound opportunity exists for the Irish state to implement IPCC pathways with the highest environmental and co-benefit potentials through a fully integrated development of the Irish hemp industry. This would begin the process of establishing standards for industrial development towards realising climate policy objectives.

The Irish Hemp Industry and Climate Mitigation Objectives

Industrial hemp is scientifically proven to absorb more CO₂ per hectare than any forest or commercial crop. It is the ideal carbon sink. Its sequestration potential is prolific and its capacity to impact industrial carbon emissions is immense. Hemp is the most complete plant-based protein we have, it contains all nine essential amino acids and has considerable nutritional, health and medicinal properties. A growing body of international research demonstrates that commercial hemp farming has a significant positive impact on the regeneration and socio-economic integration of rural communities. In acknowledgement of these and other potentials, the UN is expected to amend its cannabis directive in early 2019. The new directive will substantially reflect the terms of reference and the recommendations of the Intergovernmental Panel on Climate Change (IPCC) report (2018).

Outside of its enormous potential as biofuel, hemp is currently used in the construction, marine construction, car manufacturing, paper, food, animal bedding, clothing, drinks, health, pharmaceutical and cosmetics industries (to name but a few), and there are solid indicators that it will replace other carbon intensive processing in a further range of industrial applications. Petrol-based fiberglass, for example, is more than 400% more expensive to produce than hemp-based fiberglass of superior strength and quality. Rapid advances in hemp technology are bringing production costs well below carbon-based equivalents and the hemp industry is now the fastest growing employment provider in the US, outperforming the US tech industry by a ratio of 2:1 in 2017.

The nutritional food value of hemp, its soil-carbon sequestration properties and low energy requirements, its capacity to improve the yield of rotation crops and to reduce the impact of afforestation on agricultural land-use, as well as its employment and rural regeneration potential, means that hemp more than comprehensively fits the profile for IPCC “transition pathways that carry the highest co-benefits - including for human health.”

Ireland's hemp industry - because it remains largely an undeveloped site - is very well positioned to maximise economic, social and environmental returns through integrated development at this time. Our research suggests that a substantial policy framework which would support an integrated development plan for the sector already exists in the state, and that the strategic objectives of several key policy mechanisms, across a combination of national development plans, would be substantially advanced through such development. We do not consider, for example, that the absence of focus on the hemp industry in constructing the National Development Framework should limit access to appropriate policy resources, or limit the industry potential to realise some of the more important strategic objectives of those policy instruments. It is also not disadvantageous that we would begin to develop technological capacity at a time when the rate of innovation in the sector is more stable.

A fully integrated design strategy for the hemp industry requires mapping synergies and competing demands around land-use diversification, biodiversity, and sustainable development objectives. This will optimise the benefits of agricultural practices linked with soil carbon sequestration, low energy consumption, and low-carbon food production. These correlated factors would then be mediated at local level, embedded in communities, and supported through the innovative use of policy and state funding.

The potential of existing state-owned assets, such as the Bord na Mona network, should also be considered in this context with a view to repurposing the capacity of existing infrastructure. Early rewetting and preservation of boglands to maximise their carbon sequestration value could generate revenue into the future as an offset mechanism in areas of carbon-intensive activity. As state climate mitigation targets already require the phasing out of Bord na Mona over the coming years, given its extensive rural infrastructure, our research suggests there are solid reasons to explore the viability of a meaningful redeployment of its relevant capacity in a flagship green enterprise with sustainable economic potential.

The IPCC Report advises that the climate mitigation targets of countries under the Paris Agreement, even if they were to be met in full, put us on track for global warming of three degrees or more “if there’s no increase in ambition”. Ireland is already dangerously behind schedule for reaching its emissions reduction commitments. The Climate Change Advisory Council’s 2018 report concludes that Ireland’s National Mitigation Plan will not do enough to reach the targets of the Paris Agreement or even Ireland’s own emissions targets. Likewise, the Environmental Protection Agency (EPA) forecasts a total increase in Irish emissions of between eleven and twelve percent by 2020. While the report of the UN Special Rapporteur on Human Rights and Environment (October, 2018) warns that Ireland must “protect its natural carbon sinks” and “must reduce emissions as rapidly as possible, applying the maximum available resources.”

Given the regulatory environment, our research is unfunded and under-resourced, however, indications are that innovative practice around integrated design strategies offers a real opportunity to establish new standards for industrial development towards meeting climate policy objectives. The feasibility of an integrated approach depends on admitting new perspectives which will destabilise the economic models that sustain carbon-intensive industrial development and practice. The ‘business as usual’ model has failed to impact carbon emissions and new frameworks are needed to measure what constitutes profitability in a way that can credit new realities and accomplish new objectives.

We understand the enormity of the matters presently before the Oireachtas Committee and we submit this synopsis of our report for your consideration on that basis. We feel the evidence presented by the IPCC delegation before the Committee last Wednesday allows for a reading of the potentials of the Irish hemp industry which perhaps would not have been possible before that. We appreciate your time and effort on our behalf and would be delighted to provide further detail or clarification if you require.