

**1. The Hemp Federation Ireland conference run in conjunction with the National Organic Training Skillnet on March 12th 2020 <https://www.youtube.com/watch?v=9xUfkWTrlGg>**

**1.1. Chris Allen Executive Director speaks of who controls the cannabis conversation in Ireland. Can be grown for fibre seed or oil or dual purpose crop Prohibition**

02:36 for both industrial products and for  
02:39 horticultural purposes  
02:40 they specifically state that okay  
02:44 so they shouldn't be included in the  
02:47 misuse of drugs  
02:55 prohibition also brought with it the  
02:57 exclusion of hemp  
02:59 from human diets  
03:54 slow uh compared to the rest of Europe  
03:58 okay there's been absolutely no research  
04:00 on hemp in Ireland for more than 20  
04:02 years  
04:16 upper market value of 115 billion  
04:19 euros by 2028 for this industry  
04:53 in 1964 Israeli researcher called  
04:57 Rafael Michelan he was studying the  
06:32 is that the plant-based cannabinoids  
06:36 can you feed and upregulate  
06:40 the endocannabinoid system inside of the  
06:42 human body  
06:43 okay and that's why people feel  
06:46 better when they take full spectrum CBD  
06:50 it's not that they're being cured of  
06:51 anything in particular  
06:52 it's that the function of the  
06:55 phytocannabinoid of the endocannabinoid  
06:57 system is to upregulate your homeostasis  
08:32 corporate farmer food drinks tobacco etc  
08:34 and they're dictating the way in which  
08:37 the market gets constructed  
08:19 experiencing  
08:20 exponential growth okay so  
08:42 okay so they're (corporations) are determining the  
way in  
08:44 which this industry gets developed into  
08:46 the future  
09:07 what did they call that the proposition  
09:10 64.  
09:11 so this was to kind of get their  
09:13 cannabis industry  
09:15 going okay so it was introduced in 2016

09:18 in conjunction with the legislative  
9:20 legalisation of cannabis in California  
09:23 would be the gold standard in  
09:25 environmental policy  
09:26 okay and it would provide encouragement  
09:29 for  
09:30 small-scale farmers practising  
09:32 ecologically sound and sustainable  
09:34 farming methods  
09:36 with funding for conservation habitat  
09:38 protection enforcement  
09:40 uh of environmental law the whole thing  
09:44 you know American dream environmental  
09:47 protections  
09:48 in practice what actually happened was  
09:50 that before the legislation ever went  
09:52 into effect  
09:53 the important environmental provisions  
09:55 were all overridden  
09:57 by the state okay and this effectively  
0:00 disabled the environmental safeguards  
10:02 and it encouraged corporate growth okay  
0:06 is uh from Dr Tony Saval who is  
10:10 a scholar in  
10:13 Humboldt state university  
10:18 cannabis lobby spent more than a million  
10:20 dollars lobbying holiday  
10:22 policymakers to push for legislation  
10:25 limiting the profitability of  
10:26 smes okay and how they they did that  
10:31 is that they introduced really really  
10:34 really expensive  
10:35 and difficult to fulfill licensing  
10:38 procedures  
10:46 okay in 1997 the European union  
10:49 introduced what they call a novel food  
10:51 catalog  
10:52 okay and anything that wasn't a  
10:55 traditionally eaten food  
10:57 in the European union prior to may  
11:00 of 1997 was going to be considered a  
11:03 novel food  
11:06 special regulation  
11:08 in order to get it okay or to be able to  
11:10 sell it  
11:52 but it's novel today okay  
11:55 and you need special authorization to  
11:58 get it  
2:29 that the FSAI recommended and  
12:33 it's around three million  
12:39 means  
12:40 is that nobody except a corporation

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055 12:43 could possibly afford that money nobody  
056 13:34 uh actually they're all too old we want  
057 13:37 you to give  
058 13:38 us uh examples from during the time when  
059 13:41 the plant was banned  
060 13:43 in the 20th century okay that's  
061 13:46 basically what they say  
062 13:48 it's outrageous okay so  
063 14:01 2016 the industry in Ireland  
064 14:05 and you have to remember that we do have  
065 14:07 a very old industry here  
066 14:08 okay but the CBD wave that kind of  
067 14:12 you know real interest in that and it's  
068 14:14 really good money and uh  
069 14:16 really good food, people getting turned  
070 14:19 on to hell that was really driving  
071 14:20 forward the industry okay  
072 14:22 uh 2016 the FSAI had  
073 14:26 two people asked them about CBD food  
074 14:30 supplements  
075 14:31 okay and I know both of them  
076 14:36 but then it  
077 14:39 trickles along nicely until around  
078 14:42 2018, okay and then at that point  
079 14:47 um we start seeing shops  
080 14:50 being raided by police or products being  
081 14:53 taken off  
082 14:54 uh um  
083 14:58 suppliers and and shops and etc etc etc  
084 15:00 so a very  
085 15:02 a criminalisation of of the industry  
086 15:07 then you have um  
087 15:11 following on from that you had you know  
088 15:13 some of the raids were like you can  
089 15:15 carry out like  
090 15:16 drug raids those you know people's front  
091 15:18 doors being  
092 15:20 battered down by guards and I don't know  
093 15:23 what else  
094 15:24 so all this time okay  
095 15:27 it's actually perfectly fine to grow  
096 15:30 hemp in Ireland  
097 15:32 the FSAI say to say to us that  
098 15:35 you can grow hemp with a 0.2  
099 15:39 THC and it's perfectly fine to  
100 15:42 have that sold in Ireland as a product  
101 15:45 including  
102 15:46 for food okay that was that was the  
103 15:48 instruction  
104 15:50 now three weeks ago  
105 15:53 we woke up one when uh Thursday morning  
106 15:58 and that was all gone gone  
107 16:01 the information was gone from the FSAI  
108 16:04 website  
109

16:05 and our businesses were completely and  
16:08 utterly devalued  
16:10 um and how that happened was this the  
16:12 FSAI said to us  
16:14 here's the regulation for your industry  
16:17 that we want you to  
16:18 to keep up with and we said fine  
16:22 and you know the people in this  
16:24 organisation this organisation itself  
16:27 have been pushing pushing pushing to try  
16:30 and get the state to work with us  
16:31 to put in place you know a proper stable  
16:34 regulatory framework to protect  
16:36 our supply chains and protect our  
16:37 markets okay they haven't  
16:40 so far done that but so what they did  
17:14 they introduced a completely new  
17:16 reference value that is one microgram  
17:18 per kilogram of body weight and now Kate  
17:28 uh but so the FSAI did this without  
17:32 once consulting anybody in the industry  
17:42 was asking them about the methodologies  
17:44 that we're going to be applying  
17:45 to the testing of our products what kind  
17:47 of equipment they would be using in  
17:49 those tests  
17:50 and they wrote back to me and they gave  
17:52 me all of the information i needed but  
17:54 they never  
17:55 ever ever mentioned anything about  
17:58 a new reference value that they were  
18:00 going to be applying to  
18:01 our products so what actually happened  
18:04 was that our products are all  
18:06 compliant with the only advice that this  
18:09 industry has ever been given by FSAI  
18:12 however FSAI uh did a high-level media  
18:15 campaign campaign that withdrew our  
18:17 products  
18:18 from the market really high quality  
18:19 products did a high-level media campaign  
18:22 and never once mentioned  
18:23 to people that actually our products  
18:25 were all compliant  
18:27 they never told people that they changed  
18:30 the goal  
18:31 inside of their report and so  
18:34 it just had such a negative detrimental  
18:38 impact  
19:18 in Ireland i ask for a fully integrated  
19:22 development plan for this industry so  
19:24 that we can capture not just the  
19:25 economic benefits and there are loads of  
19:27 them

19:27 but that we assess how we can also get  
19:29 the other ones  
19:30 the human food nutrition potentials the  
19:33 environmental potentials  
19:35 the you know agricultural system  
19:38 development potentials and look at  
19:42 providing a new system a new economic  
19:44 system  
19:45 to you know account for these benefits  
19:48 not just for profits  
19:50 okay so so is to encourage you know  
19:53 rural Ireland and farming communities  
19:56 and  
19:56 doing it because it all has to be  
19:58 embedded at local level

## 1.2. Jace Callaway CEO Fiona Finland speaks at the Hemp Federation Ireland Conference [https:// www.youtube.com/watch?v=HK75Ui7DKnM](https://www.youtube.com/watch?v=HK75Ui7DKnM)

00:38 you have to understand the french have a  
00:40 sewn up fibre market  
00:42 where they make speciality paper you're  
00:44 not going to compete with that  
00:50 if you had the products if you had the 00:52 market  
00:53 the Chinese would serve it cheaper  
00:56 faster better than you people eat every  
01:00 day  
01:07 I recommend that you go into food  
01:53 there's over 2 800 scientific articles  
01:56 on cannabidiol  
01:57 alone not one of them shows harm  
02:00 the authorities are scrambling  
02:02 desperately looking for something  
02:04 harmful to say about CBD and they come  
02:06 up empty-handed  
06:23 there's vitamin minerals in the seed  
08:54 high amount of omega-6 high amount of  
08:57 omega-3  
09:22 these are the only  
09:23 two clinical studies on hempstead  
09:45 we had healthy people  
09:49 we didn't expect them to get any  
09:51 healthier  
09:52 we compared him to the oil black seed  
10:54 not only safe but really healthy we  
10:57 found that the fatty  
11:06 and we were surprised to find the HDL/LDL  
11:09 ratio improved  
11:35 but we did the second clinic with hemp  
11:38 seed oil  
11:39 and this was a patient  
11:46 this is eczema and we found out

1:50 that eating him oil clears up  
11:54 excellent in about two weeks 10 days to  
11:57 14 days  
11:58 becomes very clear and uh  
14:19 we had  
14:20 in decreased  
14:23 reporting of skin dryness decreases  
14:28 in the skin itchiness and decreased use  
14:31 of medication after the hemp seed oil  
14:40 it just changes in a very small  
14:44 population  
14:45 that's that's highly unusual  
15:34 typically the western diet is heavy and  
15:37 omega-6  
15:38 losses so you see off to the left  
15:41 there's this pg-1  
15:42 pg2 these are inflammatory  
15:45 prostaglandins  
16:54 the nutrition of hems first off  
16:58 that excellent source  
17:01 vegetable nutrition there's nothing else  
17:03 like it in the vegetable world  
17:06 the pro both completely easily digested  
17:14 and also hemp seed oil is a functional  
17:18 food  
18:08 and if you want to lower your  
18:09 cholesterol the LDL  
18:12 attempts  
18:16 and then just spread it on your bread  
18:30 especially bird seed  
18:34 animal food versus cow  
18:37 chicken will make omega-3 eggs  
18:41 and whole hemp seed oil sediment  
18:44 or seed cake this is a very important  
18:48 market  
18:56 that nuts iron name metallic Allister's  
19:00 cough  
19:00 mixture could be really handy you look  
19:03 there the ingredients cannabis  
19:05 indica iphc i don't know what's fixing  
19:09 the cough is it  
19:10 chloroform or the alcohol  
19:21 but um it's important to know that this  
19:24 was  
19:24 a medicine and the medicine worked quite  
19:28 well  
19:57 perfectly legal for human consumption  
19:59 but what do the authorities say about  
20:01 feeding to animals  
20:11 European commission 2017  
20:15 on page 77 of this commission  
20:18 regulation you'll see listings for hemp  
20:22 seed  
20:27 right there with poppy seeds and poppy

165 20:29 meal of course  
166 20:30 these are perfectly acceptable things  
167 20:32 for animal feed  
168 20:34 it's in the law we don't have to ask for  
169 20:36 permission  
170 21:19 the extra lime oil for paints and  
171 21:22 varnishes  
172 21:23 other speciality coatings you can make  
173 21:26 inks out of it because it's a drying oil  
174 21:29 and because it's a drying oil that means  
175 21:31 it oxidizes rather quickly that's why  
176 21:34 it's not so good for soaps or cosmetics  
177 21:37 because they begin to smell like paint  
178 21:39 rather quickly and hemp seed oil is not  
179 21:42 appropriate as an iod  
180 21:44 so this is oil is too valuable to burn  
181 21:47 energy just don't even think about it  
182 21:50 you shouldn't be burning agricultural  
183 21:52 products  
184 21:53 especially a healthy food  
185 21:57 for animals with humanity

1.3. Kate Mullaney speaks at the Hemp Federation  
Ireland Conference [https://www.youtube.com/watch?v=\\_Cgyxpbz-bM](https://www.youtube.com/watch?v=_Cgyxpbz-bM)

00:39 this man he's horase plunkett  
00:42 he is um the founder his  
00:45 pr um his uh what he call it his um  
00:50 legacy to the uh to Ireland to the Irish  
00:52 farming industry is  
00:54 um the cooperative movement and  
01:22 dairy industry setting up if you know  
01:24 what i mean the dairy cooperative  
01:25 movement  
01:26 and the hemp industry was wiped out okay  
01:29 if you if you imagine the amount of  
01:32 investment in that hundred plus years  
01:34 that has gone into the dairy industry  
01:36 that was limited  
01:40 by for the hemp industry by um the  
01:43 prohibition basically of hemp  
01:52 actors that didn't want to see hemp  
01:55 progress um so  
02:23 from the last okay maybe  
02:27 10 or 10 15 20 years here's been very  
02:30 little  
02:30 investment even in that time so it'  
02:32 been the prohibition has been lifted  
02:34 to some degree um the amount of  
02:37 investment into the industry is  
02:39 is relatively small compared to let's  
02:42 say

02:42 the last hundred years in the dairy  
02:45 industry  
02:46 did that make sense so um there is a  
02:50 huge potential I  
02:52 understand sean is being a little bit  
02:54 sort of holding back a little bit on the  
02:55 uh the potential  
02:57 and that's understandable um but  
03:00 nonetheless there is a huge  
03:02 worldwide potential for hemp um  
03:05 for hemp in it's all in all its shapes  
03:08 and forms  
03:09 the hemp federation's focus though is  
03:12 industrial hemp  
03:13 so there is so this confusion i suppose  
03:16 um is where there's a crossover between  
03:19 hemp and cannabis  
03:20 okay we are very adamant in the hemp  
03:23 federation and  
03:23 the whole in the industry  
03:26 the people we're representing the hemp  
03:28 federation are hemp growers okay it's  
03:31 there isn't, there's a different lobby  
03:33 for the cannabis industry  
03:35 and a different um emerging industry  
03:39 and what we need to do is protect the  
03:42 hemp industry because it doesn't have  
03:44 the same voice it doesn't have the same  
03:47 bump behind it right now it's a smaller  
03:50 industry whereas the cannabis industry  
03:52 has massive pharmaceutical  
03:54 backing behind it  
03:58 so the industrial hemp um is the  
04:01 feedstock for  
04:02 numerous different industrial  
04:06 processes right the food the feed  
04:09 the fibre the fuel and the pharma I  
04:11 don't want to completely eliminate them  
04:13 from the talk  
04:14 um but they they they're all so hemp  
04:17 becomes the food stock for all of those  
04:19 industries um  
04:21 you know which give the opportunity for  
04:23 multiple possibilities right  
04:39 food feed fibre fuel and pharma has  
04:42 multiple industries  
04:50 um biological equivalent of crude oil  
04:54 so anywhere when you are where you  
04:56 imagine um 04:58 crude oil has been used or oil has  
been  
05:00 used you know the petrochemical industry  
05:19 um the problems for farmers are also the  
05:23 solutions  
05:42 of farming the cost to a small and

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220 05:45 medium  
 221 05:49 than the industrial farming the you know  
 222 05:52 the corporate farm  
 223 05:53 corporate farm model um so  
 224 05:58 um what am i trying to say um so while  
 225 06:01 there's a shrinking market  
 226 06:03 and there's growing costs okay  
 227 06:06 for the smaller farmers and what's  
 228 06:08 happening is the industrial  
 229 06:09 corporate farms are actually really  
 230 06:12 taking over and taking control of the  
 231 06:13 food production  
 232 06:16 because the smaller farms can no longer  
 233 06:18 compete it's getting harder and harder  
 234 06:19 to compete  
 235 06:20 so we're having to be faced with um  
 236 06:23 food that's coming from you know very  
 237 06:25 far away  
 238 06:26 and the the idea we all have to be  
 239 06:29 traceable  
 240 06:30 so every product that's on the  
 241 06:33 supermarket shelves  
 242 06:34 is every food product is traceable  
 243 06:38 okay and that trace ability creates a  
 244 06:40 huge amount of paperwork for every  
 245 06:42 single farmer  
 246 6:43 but that cost is spread out over a  
 247 06:45 massive quantity of products  
 248 06:47 when you're a massive industrial  
 249 06:49 corporate  
 250 06:51 food production but if you're a small  
 251 06:52 medium farmer that cost is much greater  
 252 06:54 to you  
 253 06:55 um so what we need to do is balance that  
 254 06:58 level that that playing field so that um  
 255 07:02 right the problem is this shrinking  
 256 07:05 market and rising cost so we need to  
 257 07:07 change that around so those problems  
 258 07:09 become our solution so that okay we've  
 259 07:12 got trace ability right  
 260 07:14 we all agree we need the trace ability so  
 261 07:40 for there may be more people per product  
 262 07:43 let's say  
 263 07:44 employed in a smaller industry than  
 264 07:45 there would be in a larger industry so  
 265 07:48 that becomes a benefit to the person in  
 266 07:51 the shop making a decision on what to  
 267 07:53 buy they can see clearly  
 268 07:55 on a certification or some kind of a  
 269 07:58 traceability so the traceability goes  
 270 08:00 further than just where  
 271 08:02 this product came from it becomes  
 272 08:06 as  
 273 08:10 a traffic light system or a  
 274

08:13 certification system where people can  
 08:15 earn points  
 08:17 um relating to how economically  
 08:20 or how environmentally friendly their  
 08:22 product has been  
 08:23 produced so it kind of stacks it up a  
 08:26 little bit against  
 08:27 the mass of big corporations and gives  
 08:29 brownie points let's say  
 08:36 growing cost becomes  
 08:38 a good thing for the smaller producers  
 08:41 food has become food production has  
 08:43 become incredibly scientific so we're  
 08:45 again drilling into the food value  
 08:48 right um the poly so it's no longer a  
 08:52 cup of coffee it's the polyphenols we're  
 08:54 looking for  
 08:54 are no longer a glass of wine again the  
 08:56 polyphenols or the mushrooms  
 08:58 are now valued for their um tri terpenes  
 09:01 i think they're called  
 09:02 um so but that that also again  
 09:06 with certainly with hemp you've got the  
 09:08 the cannabinoids it's a very valuable  
 09:10 commodity  
 09:11 um so i so hemp can come in here  
 09:14 on the scientific level um the  
 09:16 scientific food production level  
 09:19 um the younger demographic okay are  
 09:22 choosing  
 09:23 making different food choices so hemp  
 09:29 actually the biggest demograph of  
 09:33 people buying um non-animal protein for  
 09:37 instance  
 09:38 is actually meat eaters themselves  
 09:41 they're choosing to  
 09:42 you know maybe two one or two days a  
 09:44 week to choose something different  
 09:48 so the protein within the hemp or in the  
 09:50 hemp  
 09:51 products is a tremendous source of  
 09:54 protein  
 10:07 and it's time to take advantage of the  
 10:09 global hemp trend  
 10:23 important to separate um  
 10:27 sorry the hemp industry from the  
 10:28 cannabis industry  
 10:30 because it is a different completely  
 10:32 completely and utterly different  
 10:34 industry  
 10:35 um but the hemp industry again is a  
 10:38 massively  
 10:39 growing internationally traded commodity  
 11:00 two weeks ago hemp is practically



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275 11:05 prohibited in this country you can you  
276 11:06 can grow it all right and you can grow  
277 11:08 it  
278 11:08 for fibre but for food it's pretty much  
279 11:11 prohibited  
280 11:12 and because the amount of  
281 11:16 THC that's allowed in food is so  
282 11:19 tiny now um it's  
283 11:23 you can always say almost say it's  
284 11:24 prohibitive so so for any farmer who's  
285 11:26 looking to come into this industry  
286 11:28 right now with a CBD product or a food  
287 11:30 product they have to be  
288 11:32 incredibly careful they have to know  
289 11:33 what they're doing and it's and actually  
290 11:35 it's very very limiting  
291 12:01 the fact that this is the first  
292 12:02 industry-led uh conference actually  
293 12:05 because there is no  
294 12:06 government agenda here today there's no  
295 12:08 pharmaceutical agenda here today  
296 12:21 so again so the damage caused  
297 12:24 by prohibition right in one sense i am  
298 12:27 talking about  
299 12:28 the broader you know available drugs  
300 12:32 but unfortunately currently  
301 12:35 hemp is, it isn't on one hand falling  
302 12:39 into it, but it is in terms of  
303 12:41 the food safety authority and the  
304 12:44 guardi  
305 12:44 and many of the actors that are in well  
306 12:47 they're not actually in the industry  
307 12:49 they're outside the industry  
308 12:50 um so so the reality is the damage  
309 13:26 won't say single-handedly  
310 13:28 but darn i just said it uh triggered the  
311 13:31 worst  
312 13:31 crime crime wave crime wave  
313 13:35 in history without question of doubt  
314 13:38 it has created a black market with  
315 13:41 massive incentives to hook both adults  
316 13:44 and  
317 13:44 children alike  
318 13:56 dangerous substance substances available  
319 13:59 in schools  
320 14:00 and communities and prisons this is  
321 14:03 prohibition now remember  
322 14:06 it has raised gang warfare to a level  
323 14:09 never seen before and we're all familiar  
324 14:13 with what's going on in the drug  
325 14:17 world it has an impact  
326 14:20 it has removed many important human  
327 14:23 rights and civil liberties of the  
328 14:26 individuals  
329

14:27 that prohibition claims to represent  
14:30 we can see that in our prisons  
14:33 it has put previously unknown  
14:38 harmful contaminated drugs on the  
14:42 streets  
14:45 it has escalated thefts muggings and  
14:49 burglaries it has diverted scarce  
14:53 law enforcement resources where are our  
14:57 guardi  
14:58 and what are they doing it has  
15:01 overcrowded and  
15:02 obstructed the courts and prisons just  
15:05 spend a half an hour in the courts and  
15:07 you'll see that very clearly  
15:10 it has evolved and this is important  
15:12 actually evolved  
15:13 local gangs into international  
15:16 enterprises  
15:17 with intricate power structures  
15:21 that reach into every corner of society  
15:24 controlling vast swathes of territory  
15:28 with significant social and military 15:31 resources  
15:32 at their disposal these  
15:35 are the impacts of prohibition okay  
15:41 if prohibition of hemp continues  
15:47 it will limit the growth of the Irish  
15:50 hemp  
15:51 industry by restricting access to state  
15:54 supports banking insurance and  
15:57 investment  
15:58 i mean we're actually already there  
16:00 that's where we are  
16:02 we have been stymied  
16:06 we've had road blocks for the past 20  
16:09 years it's been  
16:09 a constant battle to um  
16:13 get past all the sanctions that have  
16:15 been uh against the industry  
16:16 the licensing system alone is um  
16:20 a pro a prohibition actually for farmer  
16:24 a prohibitive  
16:25 um barrier yeah to  
16:28 farmers to come into the industry okay  
16:31 so if if prohibition of hemp continues  
16:35 it will exclude Irish farmers from a  
16:38 rapidly growing global  
16:39 hemp food sector  
16:39 hemp food sector okay so the whole world  
16:43 is going to take  
16:44 advantage of what's going on if we  
16:48 if the food safety authority and the  
16:50 guard the  
16:51 insist on prohibiting  
16:55 the micro amounts of THC

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330 17:00 that are in hemp foods  
331 17:03 in this country and this is an i  
332 17:06 just so up till two weeks ago we were  
333 17:10 in a kind of gray area now we're even in  
334 17:13 a more  
335 17:14 gray area actually to be honest with you  
336 17:16 this is a cup of coffee  
337 17:18 this is a regular cup of coffee you know  
338 17:19 what you'd just make for yourself at  
339 17:21 home  
340 17:22 i don't know if you can see the  
341 17:23 difference this is what this is what  
342 17:26 this is what the government is now  
343 17:27 telling us is a cup of coffee  
344 17:29 in in terms of uh what's  
345 17:32 um safe for us  
346 17:35 to have so this the safe THC in food now  
347 17:39 is as weak  
348 17:41 are insignificant actually and um  
349 17:45 it's not it's not that i'm looking for a  
350 17:48 high from my food it's that i'm looking  
351 17:50 for the benefits  
352 17:51 the uh the health benefits from um  
353 17:54 hemp the bio availability of hemp  
354 17:58 um is tremendous has tremendous benefits  
355 18:00 to  
356 18:01 uh the hemp industry so this is 50 times  
357 18:05 weaker this is what they're telling us  
358 18:07 now 50 times  
359 18:10 which is quite significant um a jump  
360 18:14 when they didn't even ask anybody in the  
361 18:16 industry what was their advice what was  
362 18:18 what  
363 18:18 what would they consider safe it was  
364 18:21 just whack  
365 18:22 straight into what what the food safety  
366 18:23 authority decided  
367 18:25 and without any real um  
368 18:30 science and making kind of you know uh  
369 18:33 questionable  
370 18:34 claims and actually we could question  
371 8:37 the science behind  
372 18:38 their uh, I call it prohibition actually  
373 18:41 because  
374 18:42 we're at um 1.1  
375 18:46 of a milligram of  
376 18:50 THC  
377 20:09 micrograms okay so the difference  
378 20:11 between a gram  
379 20:13 and a microgram is one million a factor  
380 20:16 of one  
381 20:17 million right so there's one million  
382 20:20 micrograms  
383 20:22 in that gram a speck of dust  
384  
20:35 the the FSAI has given us permission to  
20:38 put  
20:38 a hundred micrograms okay  
20:42 100 of those little specks of dust  
20:45 are now um available for us  
20:49 in our hemp foods right traces it's tiny  
20:52 it is it's insignificant  
20:55 i'm sorry where am i um  
21:01 so oh that's going along by toughness  
21:08 of a milligram hundred micrograms per  
21:10 watt  
21:11 per day per body per day per individual  
21:14 per day yeah per person per day  
21:26 continue with the prohibition  
21:28 um  
21:32 we're going to support and he flawed  
21:35 government policy  
21:36 which takes its lead from corporate  
21:38 facing actors  
21:39 new too and i might add poorly disposed  
21:42 to the hemp industry  
21:45 and we will be responsible for the loss  
21:48 of a significant  
21:49 positive impact on the regeneration and  
21:52 the socioeconomic  
21:53 integration of a collapsing of the  
21:56 collapsing rural communities so hemp has  
21:59 a huge potential here  
22:02 um with the right um  
22:06 uh information the right support behind  
22:08 it and it will also be so if we continue  
22:10 with the prohibition we'll be  
22:12 responsible for  
22:13 the loss of the economic supports to  
22:15 encourage small  
22:16 high-quality producers of value-added  
22:19 finished products  
22:20 for internal and export markets across  
22:24 the supply chain  
22:25 that will be lost and e responsible for  
22:27 the catastrophic  
22:28 environmental damage caused by  
22:31 unsustainable  
22:33 corporate facing agri industries  
22:36 so we continue on on an unsustainable  
22:38 path  
22:39 down a path that's already leading us  
22:41 into a crisis  
22:42 and prolong the human deficiency  
22:44 actually and this is  
22:45 interesting of cannabinoids  
22:49 from the recommended daily  
22:52 intake uh allowance uh the required list  
22:56 for minerals and vitamins so actually

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385 22:57 cannabinoids should be on  
386 22:59 that list currently they are not  
387 23:03 also so just to give you an idea of  
388 23:06 where i'm coming from with the whole  
389 23:07 idea of prohibition um  
390 23:09 there's many pro here's many  
391 23:13 substances that could easily given  
392 23:16 the same criteria the same scientific  
393 23:20 you know and studies let's say the same  
394 23:23 scrutiny yeah exactly and they might  
395 23:27 end up finding themselves banned as well  
396 23:29 so like caffeine i mean  
397 23:32 caffeine i'll just go into them really  
398 23:33 quickly because i know i'm being told  
399 23:34 i've  
400 23:35 minutes left caffeine alcohol  
401 23:39 or tobacco  
402 23:43 sugar um nutmeg  
403 23:47 myristasin as a leucitogenic oddly  
404 23:49 enough and poppy seeds we all know poppy  
405 23:51 seeds  
406 23:52 10 micrograms is considered safe of the  
407 23:55 codeine of morphine that's in poppy  
408 23:57 seeds 10  
409 23:5 that's 10 times what's considered safe  
410 23:59 THC  
411 24:01 and we're allowed cheese contains  
412 24:05 um tryptophan which makes you feel  
413 24:08 relaxed and calm i didn't have my cheese  
414 24:11 this morning  
415 24:12 red meat also contains tryptophan so i  
416 24:15 mean  
417 24:16 it's the vocabulary around um these  
418 24:19 these are in the foods these are we eat  
419 24:22 these foods to  
420 24:25 to feel a positive to feel the positive  
421 24:27 effect not only from the nutrition  
422 24:36 contains an  
423 24:36 anandamide uh and tryptophan actually  
424 24:40 um ananda means bliss  
425 24:43 that's what ananda means it's the amide  
426 24:46 is protein so it's the bliss protein  
427 24:48 and in cocoa  
428 24:52 a broad beans have a substance or a  
429 24:54 molecule called el dopa  
430 24:56 which is used a psychoactive used in the  
431 25:00 treatment of parkinson's disease  
432 25:02 so these are these i mean this is a tiny  
433 25:04 list compared to what's actually out  
434 25:06 there  
435 25:06 in our foods what we are and this is  
436 25:08 where i'm saying the  
437 25:09 the science of food is changing right  
438 25:13 um and so what was the problem for us  
439

25:16 now actually we can highlight  
25:18 where the the language around THC the  
25:21 language our attempt to rank for  
25:22 cannabis is very provocative let's say  
25:25 when we just we talk about uh caffeine  
25:28 or sugar  
25:28 it's a mood enhancer when we talk about  
25:30 um cannabis  
25:31 our THC it's a toxin you know it's so  
25:34 you know we have to be equal  
25:35 uh just equal the language  
25:41 these companies i know it's probably not  
25:43 terribly clear but you have no  
25:45 problem recognising who they are these  
25:48 are the corporate  
25:49 facing industries i'm talking about food  
25:52 producers  
25:53 um none of these companies have any  
25:55 qualms about using  
25:57 caffeine sugar whatever i mean actually  
26:00 if you want to know how addictive sugar  
26:02 is try giving it up  
26:04 try giving sugar up and you'll know very  
26:06 clearly  
26:07 how addictive it actually is and yet  
26:10 it's  
26:11 okay there's sugar tax on certain foods  
26:14 but it's  
26:14 accepted there is no language around  
26:17 sugar that makes  
26:18 it in syndry let's say  
26:22 so to future proof the hemp industry um  
26:26 we need to actually disentangle  
26:28 ourselves from  
26:29 the history of prohibition from the  
26:31 historic language  
26:33 around hemp around THC  
26:36 and we need to challenge the claims that  
26:39 the  
26:40 FSAI the FSAI  
26:42 are making and create a sensible  
26:45 legislation so if  
26:46 if they had have come before they wrote  
26:48 the report if they had to come to the  
26:50 industry  
26:50 they would have got a much more balanced  
26:52 view actually  
26:54 the um international and international  
26:57 narcotics control board  
27:01 they well first of all they say hemp  
27:02 isn't isn't on the list it doesn't  
27:05 fall under and the control of drugs act  
27:09 and it's misleading to put it under  
27:11 there but



440 27:12 these corporate actors  
441 27:16 purposely mislead governments  
442 27:20 uh government agencies um  
443 27:23 so that they can bring in their own  
444 27:26 agenda  
445 27:26 actually is the truth of what's going on  
446 27:31 we need to we need the opportunity to  
447 27:33 really reduce  
448 27:35 reduce the to uh  
449 27:39 release rather the um the deal that hemp  
450 27:41 actually is  
451 27:42 it's really important it has a huge  
452 27:44 value um  
453 27:48 industry needs  
454 27:50 upwards ny small industry to get  
455 27:52 started needs upwards of a thousand  
456 27:53 acres  
457 27:54 okay so that's where we're at  
458 27:58 there i don't think there may be one or  
459 28:00 two industries in the country that are  
460 28:02 close to a thousand acres but you know  
461 28:04 to get the to get enough product behind  
462 28:06 you to go to market  
463 28:07 you've got you're talking about a  
464 28:08 thousand it doesn't matter what your  
465 28:09 product is it doesn't matter at all  
466 28:11 you're going to need  
467 28:12 uh you know to really hit the world  
468 28:14 market you're going to need a thousand  
469 28:16 acres at least  
470 28:18 hemp can out pay i'm not going to i'm not  
471 28:20 going to put a figure  
472 28:21 figure on it sean it it can out pay any  
473 28:24 other agricultural crop  
474 28:25 no question if we are allowed the value  
475 28:29 that's there  
476 28:30 okay and the global abundance program  
477 28:33 which marcus will talk about  
478 28:35 is another way of future proofing the  
479 28:37 industry it's a very interesting um i  
480 28:39 don't think he's  
481 28:40 going to touch on it for much but he'll  
482 28:41 give you a little bit more information  
483 28:42 about this global abundance  
484 28:44 program and the regenerative farming  
485 28:45 that what shawn has talked about  
486 28:47 Ireland will be will sorry will Ireland  
487 28:50 be  
488 28:51 first to market or will we just lag  
489 28:52 behind and  
490 28:54 lose miss an opportunity that and in  
491 28:57 order to do  
492 28:58 to take up the opportunity we have to be  
493 28:59 prepared to put a little bit of effort  
494

29:01 in it's not like sean said it isn't  
29:02 going to happen overnight  
29:03 it's going to take a couple of years we  
29:06 need to  
29:07 get the experience become  
29:10 hemp farmers so that doesn't happen  
29:12 overnight for sure

Favours criminals to have prohibition or they have no business, they will lobby government to keep illegal

#### 1.4. Anita Hemmila speaks at the Hemp Federation Ireland Conference on the reintroduction of hemp in Finland and elsewhere <https://www.youtube.com/watch?v=iRXjLMoyJCc> and was not coded as the majority of the presentation is a history of hemp in Finland and not relevant to the research question

09:42 really focusing on the fibre  
09:44 which seems to be the case with all the  
09:46 people that start  
09:47 uh start with him during modern times  
09:50 that they focus on the fibre aspect  
09:58 in the police or the police will not  
10:01 perhaps  
10:02 drug content so although we were using  
10:05 these trends variety  
10:08 which are very low in THC as the most  
10:13 probably more already nevertheless uh  
10:17 by bringing this issue up in the in the  
10:20 newspaper  
10:21 you know it becomes sort of a bigger  
10:24 thing that what really was in the end  
12:30 and the police however the situation is  
12:34 not yet clear for the authorities  
12:36 in this hankasami case the police were  
12:39 afraid of possible side effects  
12:41 and unauthorized visits to the hemp  
12:44 field  
12:45 says the crime commission commissioner  
12:48 paulie huskin  
12:49 the central police discusses the  
12:51 principles concerning comparable future  
12:54 cases today  
12:55 advanta representation from the ministry  
12:58 of agriculture  
12:59 and forestry is also so  
13:03 as you can see from this article the  
13:06 emphasis is very much  
13:07 on the legality or the possible  
13:11 illegality of what we were doing  
13:14 and that's why the hemp field was cut  
13:17 down

4:02 emphasis  
14:03 of the police needing guidelines for  
14:05 help hemp cultivation  
15:23 and that's why we had unwanted disciples  
15:26 there  
15:26 were some youngsters that came to  
15:30 get some plants when they were still  
15:31 growing there so  
15:33 that is the side effects the unpleasant  
15:35 side effects that the police

### 1.5. Stefan Nölker Wunderwald speaks at the Hemp Federation Ireland <https://www.youtube.com/watch?v=khPSdKM39YU> Germany perspective

A history from a German perspective. Not included as transcripts provided for by You Tube is broken between English and Germany and also the context is from a German perspective.

### 1.6. Professor Peter Thorne Climatologist NUI Maynooth speaks at the Hemp Federation Ireland Conference, expanding agriculture practices to reduce our national carbon footprint <https://www.youtube.com/watch?v=7EaqpU0U-Lw&t=1342s>

21:34 and in a joined up way which land has to  
21:36 be part of the solution but land can't  
21:39 do it all  
21:42 we have options the good news is several  
21:46 of those options  
21:47 do not increase the competition for land  
21:51 so we can enact a solution that does not  
21:53 compete with other solutions  
21:55 or other uses of the land  
22:00 but land use contributes about one  
22:02 quarter of current global  
22:04 greenhouse gas emissions  
22:07 at the same time land ecosystems  
22:1 particularly undisturbed ecosystems  
22:13 can take up huge amounts of carbon  
22:18 some of the mitigation options include  
22:20 things like improving the peatlands  
22:25 but there are barriers there are always  
22:27 barriers to implementing adaptation and  
22:29 mitigation options there are always  
22:31 entrenched  
22:32 interests so gross emissions from  
22:35 agriculture forestry and other land use  
22:37 make up about a third of the total  
22:39 greenhouse  
22:40 global emissions

22:43 but land accounts for 61% of our human  
22:47 methane emissions that's  
22:50 ruminants and rice primarily ruminants  
22:57 and fifty percent of the nitrogen  
22:59 applied to agricultural land as  
23:01 fertilisers is not taken up by the crop  
23:04 and results in n2o emissions and then to  
23:06 n2o us another greenhouse  
23:08 gas so you need to be very smart in your  
23:11 application of fertiliser if you don't  
23:13 want to leave a greenhouse gas footprint  
23:15 on the  
23:16 on the atmosphere  
23:20 grazing lands are responsible  
23:23 for more than one-third of the total  
23:25 anthropogenic  
23:27 n2o emissions and one-half of  
23:29 agriculture  
23:31 emissions so  
23:34 ruminants really are the bad boys here  
23:36 there is no getting away from that  
23:38 scientifically there is no way of  
23:40 sugarcoating that message  
23:42 scientifically it is ruminants that have  
23:46 the greatest intensity  
23:48 greenhouse gas intensity of any  
23:51 agricultural production  
23:54 about a quarter of the mitigation  
23:56 pledged under the Paris agreements is  
23:58 likely to come from land-based  
24:00 mitigation so from the agricultural  
24:02 sector  
24:06 the largest potential is for reducing  
24:09 emissions  
24:09 through reduced deforestation or forest  
24:13 degradation  
24:15 a shift to plant-based diets and reduce  
24:19 food and agricultural waste now the ipcc  
24:22 can't tell people to go vegetarian  
24:25 but it is saying that if you want to  
24:28 reduce the greenhouse gas emissions  
24:30 you do need to become more vegetable  
24:34 based in your diets  
24:37 response options the mitigate global  
24:42 warming will also affect the climate  
24:43 locally and regionally  
24:45 so if you change the land use if you  
24:47 change the irrigation you will change  
24:50 the surface characteristics and that  
24:53 will affect the climate  
24:58 locally  
25:00 strong land-based mitigation  
25:04 scenarios include emissions reduction in  
25:07 other sectors

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550 25:09 and limiting to one and a half or two  
551 25:13 degrees would require conversion of  
552 25:15 large  
553 25:15 swathes of land for afforestation  
554 25:19 reforestation and bioenergy crops  
555 25:24 so we need to requisition the land that  
556 25:26 is currently grazed  
557 25:28 for example and reforest it  
558 25:32 and use it to burn bio energy to  
559 25:35 to grow bioenergy crops  
560 25:39 the good news is the land that we are  
561 25:40 already using could feed the world in a  
562 25:42 changing climate and provide biomass for  
563 25:44 renewable energy  
564 25:46 but there's always a but it would  
565 25:48 require early and far-reaching action  
566 25:51 across several fronts the land  
567 25:54 degradation adversely affects people's  
568 25:57 livelihoods  
569 25:58 and occurs over about a quarter of the  
570 26:00 earth's ice-free land areas  
571 26:03 and it may not feel like it but there  
572 26:05 are almost certainly is land degradation  
573 26:08 going on in Ireland  
574 26:10 there are soils today which are  
575 26:12 impoverished  
576 26:13 compacted less productive  
577 26:17 that you get into this vicious cycle of  
578 26:19 applying more and more fertiliser  
579 26:21 and pesticide to keep the land as  
580 26:24 productive as it once was  
581 26:28 so land use changes and unsustainable  
582 26:31 land  
583 26:31 management are direct human causes of  
584 26:34 degradation  
585 26:36 and agriculture is dominant in that  
586 26:38 degradation  
587 26:41 climate change exacerbates those  
588 26:43 underlying issues  
589 26:45 fundamentally  
590 26:50 so land degradation is the driver of  
591 26:52 climate change  
592 26:55 a degraded land holds less carbon it  
593 26:58 actually releases carbon  
594 27:00 so when you impoverish the land your  
595 27:02 land changes from perhaps say  
596 27:05 net sink to a net source  
597 27:08 so you exacerbate the problem and in  
598 27:11 some cases land  
599 27:12 degradation can be either avoided  
600 27:14 reduced or reversed by  
601 27:16 implementing sustainable land management  
602 27:18 restoration and rehabilitation practices  
603 27:23 lack of action to address land  
604

27:25 degradation on the other hand  
27:29 will increase emissions and reduce  
27:32 carbon sinks inconsistent with  
27:36 the emission reductions required to  
27:38 limit global warming to one and a half  
27:39 to two degrees  
27:40 so if we continue business as usual if  
27:42 we continue the over production over  
27:45 exploitation degradation of land  
27:47 fundamentally  
27:49 it will become much much harder to meet  
27:51 one and a half  
27:52 two or any other climate target the more  
27:55 we degrade and overuse the land the more  
27:57 the land turns into a net carbon  
28:00 source and the harder it gets to  
28:02 maintain  
28:03 the climate where we want it to be  
28:09 what do we need to do to move this  
28:11 forwards well we need a mix of policies  
28:15 we need regulation we need land use  
28:18 zoning  
28:19 land sparing and land sharing approaches  
28:22 and that's where  
28:23 for example the re-imagined cap could  
28:26 come in  
28:27 if we do cap well the common agriculture  
28:30 policy well and tier one and tier two  
28:32m well  
28:33 we could imagine a payment structure  
28:36 that actually rewarded  
28:38 doing the right thing in the right place  
28:42 sightings of renewable energy needs to  
28:46 be  
28:47 consistent with local livelihoods and  
28:50 needs we need to include  
28:54 costs of environmental effects  
28:56 fundamentally  
28:58 we need to worry about land tenure  
29:03 we also need to worry about voluntary  
29:06 changes by citizens  
29:07 not the farmers themselves necessarily  
29:10 but citizens  
29:13 are they going to change diet standards  
29:16 certification collective action is  
29:19 is movement going to occur from the  
29:20 citizens  
29:23 persuasive this is where again where the  
29:26 cap can come in payments for ecosystem  
29:29 services if part of the cap payment  
29:32 is hedgerow maintenance which maintains  
29:35 the healthy ecosystem  
29:37 all the better  
29:42 early warning systems and risk

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605 29:45 risk sharing mechanisms  
 606 29:48 so they're talking about a broad kind of  
 607 29:54 parchment that you have to fill in there  
 608 29:58 are many things that have to happen  
 609 30:00 to get movement in this land use  
 610 30:04 so there is limits to adaptation and  
 611 30:09 land-based carbon sinks there are limits  
 612 30:11 to what we can do this  
 613 30:13 is all about that land can do part of  
 614 30:15 the problem but can't do it all  
 615 30:18 we can't take everything on land  
 616 30:22 and land management we have to do other  
 617 30:25 things  
 618 30:26 coordinated action to tackle climate  
 619 30:28 change can simultaneously improve the  
 620 30:30 land  
 621 30:31 food security and nutrition and help to  
 622 30:33 end hunger  
 623 30:36 so one of the crazy things is that  
 624 30:39 uh currently nearly a billion people are  
 625 30:43 currently under now  
 626 30:44 undernourished while two billion adults  
 627 30:48 are either  
 628 30:48 overweight or obese it's not that we  
 629 30:51 don't  
 630 30:52 have enough food it's that we don't  
 631 30:54 distribute that food equitably across  
 632 30:56 society  
 633 30:59 but the food system is under pressure  
 634 31:02 from non-climate stressors  
 635 31:05 and from climate change  
 636 31:09 climate change is already affecting food  
 637 31:11 security  
 638 31:13 through increasing temperatures changing  
 639 31:15 precipitation patterns  
 640 31:17 and extreme events and it's going to get  
 641 31:20 worse  
 642 31:22 and distribution of pests and diseases  
 643 31:25 will change affecting production  
 644 31:27 negatively in many regions  
 645 31:33 so food and emissions  
 646 31:36 25 to 30 globally of emissions down to a  
 647 31:40 food  
 648 31:40 production  
 649 31:45 we can do better supply side practices  
 650 31:47 can help mitigate climate change by  
 651 31:49 reducing crop and livestock emissions  
 652 31:51 absorbing carbon in soils and biomass  
 653 31:53 and decreasing emissions intensity  
 654 31:58 consumers can do their best in terms of  
 655 32:00 their diet  
 656 32:03 and we can all do a bit better on  
 657 32:05 reducing the massive amount of loss and  
 658 32:07 waste that occurs  
 659

32:08 in the system and politics  
 32:12 policies markets institutions and  
 32:15 governance and meet needed to make that  
 32:17 change  
 32:18 but as i said better land management can  
 32:20 play its part in tackling climate change  
 32:22 but it can't do it all  
 32:24 what are the options land challenges and  
 32:28 response options vary based upon region  
 32:31 and context which means Ireland's  
 32:33 response options are different to  
 32:36 brazil's  
 32:37 but equally donegal's might be different  
 32:40 from wexfords  
 32:42 so there is a need to recognize  
 32:44 differentiated opportunities  
 32:46 and options  
 32:50 some options a plus a win-win  
 32:56 most options can be applied without  
 32:58 competing for the available land  
 33:02 but some options could greatly increase  
 33:08 competition  
 33:10 bioenergy and BECCS which is bioenergy  
 33:18 are scale dependent but they have a  
 33:19 large mitigation potential so if we can  
 33:22 grow  
 33:22 instead of burning coal at money point  
 33:25 we could grow  
 33:26 a sustainable crop and burn that at  
 33:29 money point  
 33:30 and furthermore capture that carbon as  
 33:32 it's  
 33:33 that carbon from that burning process  
 33:36 and  
 33:37 store it deep in the ground then we  
 33:40 could remove carbon from the system  
 33:44 mono culture bio energy crops they  
 33:47 can result in land competition and have  
 33:50 adverse effects for  
 33:52 food land degradation biodiversity and  
 33:54 water scarcity  
 33:57 which is that the potential for  
 33:59 mitigating climate can only be realised  
 34:01 if agricultural emissions are included  
 34:03 in mainstream climate policy  
 34:06 we cannot continue what has been the  
 34:08 case at the national level  
 34:10 of agriculture constantly bleeding  
 34:13 special case  
 34:14 agriculture needs to be in the  
 34:16 mainstream of our climate policy if it  
 34:19 is to be effective  
 34:23 acting early will avert or minimise  
 34:26 risks reduce

660 34:27 losses and generate returns on  
 661 34:32 investment  
 662 34:34 measuring progress towards goals is  
 663 34:36 important to decision making  
 664 34:37 adaptive governance and policy success  
 665 34:41 and we need a flexible adaptive  
 666 34:44 iterative approach  
 667 34:46 so those are the two special reports  
 668 34:49 what the heck does this mean for us  
 669 34:51 nationally in our national context  
 670 34:58 well our agriculture sector for a  
 671 35:01 developed nation we have a huge  
 672 35:03 proportion of our emissions  
 673 35:05 in agriculture the norm in a developed  
 674 35:08 nation  
 675 35:09 is that we have five to ten that they  
 676 35:11 have five to ten percent of their  
 677 35:13 emissions profile is agriculture we have  
 678 35:16 a  
 679 35:16 third so we have a huge  
 680 35:19 challenge and everybody recognises that  
 681 35:22 agriculture is the hardest nut to crack  
 682 35:25 but if we're going to get to net zero  
 683 35:27 we're going to have to crack it  
 684 35:29 and the challenge is going to be for  
 685 35:31 Ireland how to do that  
 686 35:35 why is it such a problem well our  
 687 35:36 predominant farming is of ruminants  
 688 35:39 cattle and sheep that emit methane which  
 689 35:41 is a powerful greenhouse gas  
 690 35:45 it's also a short-lived greenhouse gas  
 691 35:47 it has 9 to 11 year half-life and you  
 692 35:49 will have heard in the news  
 693 35:51 this it doesn't matter because it's  
 694 35:53 short-lived  
 695 35:54 and it doesn't matter because it it  
 696 35:57 gets removed quickly and therefore we  
 697 36:00 shouldn't be beaten over the head for it  
 698 36:03 well there's a couple of problems with  
 699 36:05 that  
 700 36:07 one is that methane's primary means of  
 701 36:10 removal there's oxidation  
 702 36:12 in the troposphere and that oxidation is  
 703 36:14 the water vapor and carbon dioxide  
 704 36:18 so you swap one very powerful  
 705 36:20 short-lived greenhouse gas  
 706 36:22 three much less powerful but very very  
 707 36:25 much  
 708 36:25 longer-lived greenhouse gas  
 709 36:29 so actually if we wanted to keep  
 710 36:31 Ireland's  
 711 36:33 total agriculture sector contribution  
 712 36:36 stable we would need to reduce the  
 713 36:39 national herd emissions two percent  
 714

36:42 year-on-year  
 36:43 because that two percent is the effect  
 36:46 of the co2  
 36:47 oxidation escape pathway of methane  
 36:51 so we can't keep the herd the same we  
 36:53 can't keep the herd emissions the same  
 36:55 we're actually  
 36:56 incrementally adding to our greenhouse  
 36:58 gas burden  
 36:59 but the bigger issue here is think about  
 37:03 natural island without human  
 37:04 interference there would be a  
 37:06 vanishing small number of ruminants on  
 37:09 the land  
 37:11 so our natural methane emissions from  
 37:14 ruminants would be as close as damage  
 37:16 zero so they're elevated  
 37:21 due to our influence saying well now  
 37:23 we've elevated them we can't do anything  
 37:25 doesn't seem to me to be a fair and just  
 37:29 way to think about a transition when we  
 37:31 have a finite amount of carbon that we  
 37:34 can  
 37:34 emit if we're to keep globally between  
 37:37 one and a half or two degrees  
 37:39 it isn't an argument that to me makes  
 37:41 any sense  
 37:46 what can we do well we can diversify  
 37:49 and in here this is a bar chart the  
 37:53 length of the bars  
 37:54 is the total carbon intensity  
 37:57 of different food types and basically  
 38:00 the top four bars  
 38:01 here are various types of cows and cows  
 38:05 and sheep  
 38:06 and everything else is everything else  
 38:09 so fundamentally whatever we diversify  
 38:12 away from that isn't cattle  
 38:15 and sheep we will reduce our  
 38:18 impact upon the environment why else  
 38:21 would we  
 38:22 diversify well it would increase our  
 38:26 national resilience if we produce more  
 38:28 of what we consume  
 38:30 we can grow broccoli and yet we import  
 38:33 it from south east Spain  
 38:34 why it doesn't make any sense  
 38:39 it would also reduce our dependency upon  
 38:41 a single market  
 38:43 we are fundamentally dependent upon the  
 38:46 price point of beef  
 38:48 as has been very well shown and  
 38:52 dairy products if the market full bottom  
 38:54 falls out of that market



715 38:57 there's nowhere to go because the sector  
716 38:59 is uniquely dependent upon that one  
717 39:02 source of income that one market  
718 39:07 it would reduce the risk profile of the  
719 39:09 sector to out  
720 39:10 outbreaks of pests and diseases and i  
721 39:12 know when I've said this on national  
722 39:14 media I've been  
723 39:15 pilloried for it but hopefully covid 19  
724 39:18 is a wake-up call to people that new  
725 39:22 pests and diseases  
726 39:23 new virulent forms of disease  
727 39:27 can and will come up they come up to  
728 39:28 humans they come up to  
729 39:31 cattle and other animals why  
730 39:35 run the risk when you can diversify the  
731 39:38 sector  
732 39:40 you should also address the biodiversity  
733 39:42 challenges that we have  
734 39:45 and it can also be diversified into  
735 39:49 other things  
736 39:50 all those roofs on the on the milking  
737 39:53 sheds  
738 39:55 they could capture that sun if we got  
739 39:58 our energy market right  
740 39:59 you could export it onto the grid and  
741 40:02 you could have a base  
742 40:04 um income that had nothing to do with  
743 40:06 agricultural production at all but  
744 40:08 actually was about  
745 40:10 how you use the land to produce energy  
746 40:12 in addition  
747 40:14 what does it need it needs incentives it  
748 40:16 needs cap reform and national policy to  
749 40:18 be lined up we need to stop  
750 40:21 supporting fundamentally  
751 40:24 the development of specialisation in  
752 40:27 beef  
753 40:28 and dairy and we need to promote  
754 40:31 diversification  
755 40:32 we fundamentally need the right choices  
756 40:35 in the right place  
757 40:36 which means we need a national land use  
758 40:38 plan that is non-prescriptive  
759 40:41 so we need to understand what we have  
760 40:43 where in terms of land  
761 40:45 and what is possible to grow where what  
762 40:48 use of the land is possible to put where  
763 40:51 and we need to avoid silly things like  
764 40:53 putting planting forests on peat bogs  
765 40:55 peat bogs are really our friends  
766 40:57 in two ways they are a multi-centennial  
767 41:01 sink of  
768 41:01 carbon and they are also great at  
769

41:04 regulating water flows  
41:07 the Shannon would not have flooded like  
41:09 it has in this last month  
41:11 if we had retained our up our raised  
41:14 peat bogs over the midlands  
41:16 they would have soaked it up they would  
41:18 be releasing it over the entire  
41:20 summer season we've denuded them  
41:23 and they're not there any longer so we  
41:26 need appropriate and profitable options  
41:29 to the particular context of each farm  
41:32 not every farm will be able to grow a  
41:35 given crop  
41:37 but we need to give each farm a range of  
41:39 options that are actually sensible and  
41:41 that are  
41:42 not prescriptive but are avoiding them  
41:45 making the wrong choices  
41:47 we need community buy-in and we need it  
41:49 to be a just transition  
41:51 if someone spent a hundred thousand  
41:54 euros on a new milking parlor  
41:57 we can't just say hard luck you're no  
41:58 longer allowed to grow  
42:00 you're no longer allowed to produce  
42:02 dairy you've got to do something else  
42:04 without any recompense at all we have to  
42:07 have a just transition for the sector  
42:09 the sector absolutely needs to diversify  
42:13 in many different ways so that we are  
42:15 not dependent upon a single market a  
42:17 single product  
42:18 patchwork quilt island sounds very nice  
42:20 to me  
42:22 it's robust it's diverse  
42:26 it supports the robust and diverse rural  
42:28 economy so  
42:30 that's all I had to say on climate and  
42:32 well i think we should be going

**1.7. Ed Hanbridge speaks at the Hemp Federation  
Ireland Conference on Why join the Co Op**  
[https://www.youtube.com/watch?v=z3br2\\_wv4sU](https://www.youtube.com/watch?v=z3br2_wv4sU)

00:20 now uh the co-op is going on the seven  
00:23 pillars  
00:24 and it's sort of the different aspects  
00:26 of it let you have  
00:27 your personal well-being being the likes  
00:29 of your CBD  
00:31 the food then is your seed and the oils  
00:34 the carbon then is the carbon that the

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770 00:38 hemp will sequester and we know that  
771 00:41 it's a good bit  
772 00:42 the rural generation uh that's really a  
773 00:45 big one for the co-op because  
774 00:47 um we want to get  
775 00:51 people back working to the land sort of  
776 00:53 producing locally  
777 00:55 processing locally and selling locally  
778 00:57 and that's sort of  
779 00:59 the idea that we have animal welfare is  
780 01:02 sort of feed bedding things like that  
781 01:06 and bioeconomy there is the  
782 01:10 um the likes of your bio refineries now  
783 01:13 that  
784 01:13 are coming in they've done the test with  
785 01:15 the grass and we're hoping to get tests  
786 01:17 done then with the with the likes of the  
787 01:18 hemp and things like that and get the  
788 01:20 oils and  
789 01:20 the different aspects of it and it's  
790 01:23 just construction then  
791 01:24 building uh we know that that's the big  
792 01:26 one um  
793 01:28 so that's that's really where we're  
794 01:30 looking at that you have to start  
795 01:32 processing  
796 01:32 get your build materials out there and  
797 01:35 um  
798 01:36 build build an industry is basically it  
799 01:42 uh so the hubs is basically  
800 01:45 uh going to be broken down that you will  
801 01:47 have  
802 01:48 the the co-op being a sort of an  
803 01:51 umbrella and under that then  
804 01:53 you have you'll have regional ones and  
805 01:55 even county because the more of these  
806 01:57 hubs that we have the better  
807 01:59 and the more people that are producing  
808 02:02 locally  
809 02:02 um that's really what we want to see  
810 02:06 in Ireland get people back working  
811 02:09 locally not having to go to Dublin and  
812 02:12 be in a car park for  
813 02:13 two hours every day so um  
814 02:17 they're the the members then that were  
815 02:20 hoping to get into the co-op then are  
816 02:23 farmers of course because we need to to  
817 02:25 grow it  
818 02:26 but more so you want the processors  
819 02:29 and we need to to build these markets  
820 02:31 and the marketing of the whole thing  
821 02:33 is uh vital to the whole thing that we  
822 02:35 need the processors  
823 02:37 to to start developing products  
824

02:40 to start the marketing  
02:43 and that sort of thing and so if you're  
02:47 researching we want those people uh  
02:50 retailers the same  
02:51 we need everyone across the board so  
02:53 like  
02:54 anyone's name could be up on this uh  
02:57 board really  
02:58 because there's so many uh aspects to  
03:00 the  
03:01 hemp that's it's just there's no end to  
03:03 the amount of people that's needed  
03:06 um ah jenny  
03:09 so the benefits really to the co-op  
03:13 and why you would want to join is  
03:16 the support that you'll get and i have  
03:19 noticed that i  
03:20 i've got a lot of support from them that  
03:23 when i started growing  
03:24 that there wasn't these conferences  
03:26 going on  
03:27 and there wasn't anywhere really to get  
03:29 your information apart from the internet  
03:31 and the internet can light you  
03:33 that's uh you don't want to believe  
03:36 everything that you read that you really  
03:37 have to get out there and start  
03:39 learning by doing or that's what we did  
03:40 i did anyway to  
03:43 to try and progress to things so but  
03:46 with that it did you  
03:49 i did build up networks and got to know  
03:51 an awful lot of people and  
03:53 even here today like it's it's through  
03:56 that network and  
03:57 and that you get information and  
04:00 education so like that is a big key to  
04:03 the whole thing is the  
04:04 the educational side of it and when  
04:06 you're in the co-op  
04:08 um you do get that that you you have  
04:10 that sort of  
04:11 inclusion that people will  
04:15 talk to you they'll give you their  
04:16 information and it's  
04:19 vital going down going forward because  
04:22 um  
04:23 you need that information you need to  
04:24 know what mistakes have been made  
04:27 was um what's the best way of doing  
04:30 different things  
04:31 so it's all um  
04:34 it's about that networking and the more  
04:37 people that's in it

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825 04:38 the more information is gathered and the  
826 04:40 more that  
827 04:41 information then can be used for people  
828 04:44 coming afterwards  
829 04:46 uh the price of things is is a big thing  
830 04:49 as well that  
831 04:50 you'd be hoping with the co-op you will  
832 04:52 have a more buying power for a start  
833 04:55 that say for the likes of sowing season  
834 04:58 isn't too far away now  
835 04:59 that you'll have buying power there for  
836 05:01 buying your seed  
837 05:02 even the machinery that's needed um  
838 05:06 i don't know if the co-op is actually  
839 05:08 going to buy the machinery but it will  
840 05:10 be able to promote any of the people  
841 05:13 that have machinery in the co-op  
842 05:15 and that you're known and it's it's  
843 05:17 really all about advertising as well  
844 05:19 that  
845 05:20 once you the the marketing side of  
846 05:21 things is  
847 05:23 vital that marketing once you start you  
848 05:26 can't stop because people do forget easy  
849 05:29 so you need to start that marketing  
850 05:32 and then you'll have that brand then  
851 05:34 behind you that  
852 05:36 if you have supplied the co-op and they  
853 05:37 have products on the shelf or  
854 05:39 they'll they'll advertise your products  
855 05:42 to  
856 05:42 the other members it's advertising  
857 05:45 and it's a  
858 05:46 way of getting your product out there  
859 05:48 and that's what  
860 05:49 um i'm finding with the the hemp trade  
861 05:52 that the whole hemp enterprise at the  
862 05:54 minute  
863 05:55 that the hype of things is  
864 05:58 quite high but it can be hard enough to  
865 06:02 get out there and start selling  
866 06:03 that when you're in the field doing what  
867 06:06 has to be done  
868 06:07 you might not necessarily be out on the  
869 06:09 road selling  
870 06:10 and with a co-op then there'll be more  
871 06:12 people involved there'll be  
872 06:14 there will be sales people not all of  
873 06:16 them will be farmers  
874 06:18 and it's about having everyone sort of  
875 06:20 working together  
876 06:21 to get the products out there and get  
877 06:22 them sold  
878 06:24 and and then those members will have  
879

06:26 benefits such as getting cheaper  
06:28 products then through the co-op  
06:29 so that's another advantage  
06:35 people have different reasons for  
06:36 joining the co-op  
06:39 most people it's it's financial it's to  
06:42 make more money  
06:44 but you have to have a common goal most  
06:46 people  
06:47 that are going to join a co-op will have  
06:48 that common goal and it is to see the  
06:50 hemp  
06:51 flourish it's to get to  
06:54 see an industry development from this  
06:57 plant  
06:57 because we all know that this plant is a  
06:59 good one and um  
07:03 but you can also uh  
07:07 you will get different uh benefits like  
07:09 the access to different things through  
07:11 your co-op  
07:12 and that might be a benefit of joining  
07:14 your co-op  
07:15 that's you'll get first choice on the  
07:18 products  
07:19 to be sold or you'll get your seed  
07:22 you'll get the first  
07:23 dibs on seed different things like that  
07:26 um  
07:27 the refunding then is is just that  
07:30 same thing that you can get the  
07:32 discounts on seed when you buy it in  
07:34 bulk  
07:36 and um but the dividend i suppose is the  
07:40 main one that you will join the  
07:41 co-opts as a collective you should  
07:43 make more money  
07:45 and that's what a lot of things boiled  
07:48 out at the end of the day  
07:49 is actually making money profit is is  
07:52 not a dirty word or anything so it's  
07:54 it's about making money and then  
07:57 people that just want to be involved in  
08:00 the whole thing that they see the hemp  
08:01 as  
08:02 the the future and they want to be  
08:05 sustainable environmentally friendly and  
08:07 there is  
08:08 that side of it then as well  
08:12 um so  
08:16 a cooperative in general i suppose is  
08:18 looking to be profitable  
08:20 and that will make the social side of  
08:24 things like the

880 08:25 once it's profitable it'll be creating  
881 08:26 new jobs  
882 08:28 so if we can have more jobs than locally  
883 08:30 that's what we want to see  
884 08:32 and by that then your your the whole  
885 08:35 local economy will do better  
886 08:37 and um when it's sustainable  
887 08:41 uh i mean there's no reason why we can't  
888 08:44 do it so if it's sustainable  
889 08:45 the the whole rural side of things will  
890 08:48 get better and  
891 08:49 um i like being out in the country i'm  
892 08:52 not a fan of being in the cities having  
893 08:54 to go to work that way  
894 08:55 so i'd like to see the local people  
895 08:58 doing  
896 08:59 uh doing better out the whole industry  
897 09:02 and it's to be self-sufficient then as  
898 09:05 well that when you have the co-op it'll  
899 09:07 be  
900 09:08 um everyone will be working together  
901 09:11 so that's really what has about has been  
902 09:13 included in it  
903 09:15 and um  
904 09:19 yeah it's it's it's for our young people  
905 09:21 then as well coming  
906 09:23 behind us like i have three kids and i'd  
907 09:26 like to see them  
908 09:27 get a job locally not have to go to  
909 09:29 Australia or  
910 09:31 New Zealand wherever so that's another  
911 09:34 side of it that  
912 09:35 i want to see the younger people  
913 09:38 look at him now not as a as a taboo but  
914 09:41 as something that they're going to use  
915 09:42 in their daily lives

#### 1.8. Video Kate Carmody Chairperson of Hemp Cooperative Ireland

916  
917  
918  
919  
920 09:49 through the co-op i've had a better  
921 09:50 chance of success and  
922 09:52 i've found some markets through the  
923 09:56 co-op  
924 09:57 and i've been getting that help and  
925 09:59 trying to  
926 10:01 find your way through all the  
927 10:02 legislation that there is at the minute  
928 10:04 is tricky  
929 10:04 so when you have more people working on  
930 10:07 it it's easier to  
931 10:09 get through the problem and  
932 10:13 that's this is just a video i was going  
933  
934

10:16 to show  
10:21 you don't know me where the hell is  
10:23 producing hemp  
10:25 improving their soil health and widening  
10:29 their product range they grouped  
10:31 together  
10:32 from this cooperative included  
10:35 architects and processors  
10:37 of this very interesting culture and are  
10:40 now producing more and more hem  
10:43 for various purposes  
11:02 i first came across him when i was here  
11:05 in Finland  
11:06 as part of a European project about  
11:09 traditional food  
11:11 as a biochemist i just fell in love with  
11:14 the flash when i realised how much it  
11:16 was doing  
11:17 and what also interested me as an  
11:19 environmentalist  
11:21 is the fact that it has stopped the good  
11:23 plan for saving the planet  
11:27 i grew two atheists and one of my  
11:30 journalist friends i didn't like to do  
11:32 an article about it  
11:34 when the newspaper article appeared we  
11:36 had a lot of temperatures  
11:38 and then Jim Lima arrived with  
11:41 and said would i be interested in  
11:44 getting together a group of people  
11:46 to grow him it all started from there  
11:52 we were amateurs at drawing hemp when we  
11:54 were after amateurs are  
11:55 setting up cooperatives but we've  
11:57 learned that we're getting there

#### 1.9. VIDEO Edward Hanbridge farmer and board member of hemp Cooperative Ireland

12:00 i suppose i was one of the only farmers  
12:02 that had  
12:03 uh experience in growing them i started  
12:06 looking at him  
12:07 back in 2015.

#### 1.10. VIDEO Jack O' Connor board member and Hemp Cooperative Ireland

12:07 we have a lot of  
12:09 underutilised land  
12:11 in our area once upon a time dairy  
12:14 farming  
12:14 and beef farming was very productive the

935 12:17 beef just aren't making any money  
936 12:18 anymore so we  
937 12:19 had to look at the alternatives recently  
938 12:22 hemp has come onto the radar  
939 12:24 and we've looked around what i'm saying  
940 12:26 we started the community  
941 12:28 in this rural park where we have serious  
942 12:31 issues with depopulation  
943 12:32 and children moving to the orbit areas  
944 12:36 can hemp is a great solution for farmers  
945 12:40 what we're doing is promoting them as a  
946 12:43 rotational crop  
947 12:44 they get a valid crop which will more  
948 12:47 than compensate for the  
949 12:49 loss of animals it benefits the  
950 12:53 environment to such a huge extent way  
951 12:56 more than trees  
952 12:57 trees

#### 1.11. VIDEO Glynn Evans microbiologist and farmer

956 12:57 I put hemp in order to  
957 13:00 reduce the co2 impact that I was having  
958 13:03 hemp will take in approximately 10 tons  
959 13:05 to 15 tons of co2 per acre depending on  
960 13:07 the variety that you put in  
961 13:09 that's a huge reduction in co2 per acre  
962 13:12 so it's going to be a benefit to  
963 13:16 not only us but my kids

#### 1.12. VIDEO Laura Jayne Foley farmer and board member of Hemp Cooperative Ireland

969 13:20 we live across the waterfront here in a  
970 13:22 place called loophead  
971 13:24 and um very similar conditions to Kate  
972 13:27 Carmody  
973 13:28 she's growing hemp and it's going really  
974 13:30 really well for her so once we knew we  
975 13:32 could grow well in west coast  
976 13:34 just continue to be researching it and  
977 13:35 it looks like a  
978 13:37 great practical and lots and lots of  
979 13:40 uses  
980 13:40 you know here's a plant that can help you  
981 13:43 live a natural quality of life because  
982 13:45 it can be your medicine  
983 13:47 it can feed your animals it can cloth  
984 13:50 you  
985 13:51 it can house you what what do you want  
986 13:54 I believe the future for hamp island  
987 13:57 is enormous  
988 13:58 provides opportunities for farmers for

14:01 workers our  
14:02 processors let your imagination run wide  
14:05 and it's not from smoking  
14:10 chemicals a solution for all of Europe  
14:13 if we change  
14:14 the legislation in Europe a lot of  
14:17 countries  
14:18 are very negative about him because they  
14:21 associate it with  
14:22 marijuana so there's a big education  
14:25 project to be done  
14:27 so when we started researching going  
14:29 ahead about two years ago we  
14:30 contacted the headquarters immediately  
14:33 it was a great support  
14:34 because it was an opportunity to teach  
14:37m each other what we were doing and learn  
14:38 from each other  
14:39 but also as the group has got larger and  
14:41 larger it  
14:42 gives us an opportunity to speak to our  
14:45 government and about the regulatory  
14:46 requirements and so it gives us a kind  
14:49 of i suppose power numbers  
14:51 we're all talking we're all  
14:52 communicating with each other which  
14:53 means then that we know  
14:55 which method works best which method  
14:57 didn't work  
14:58 it's only collective that more the more  
15:01 people that are in it the more  
15:02 information we're going to get  
15:03 it's not economically viable to do this  
15:06 on your own so the co-op  
15:07 offers that in licensing and in  
15:10 marketing  
15:11 and in advice and agronomy  
15:11 we have a  
15:14 good knowledge base that we have a bit  
15:17 of experience now between the different  
15:19 members  
15:20 and it's it's all going to be very  
15:22 beneficial going forward  
15:24 knowledge has been the big issue for the  
15:26 moment and learning  
15:27 in the next two years funding  
15:31 and the processing is going to become  
15:34 the  
15:34 bigger issue because we will know better  
15:36 work we want to do  
15:38 in terms of processing and then  
15:40 obviously the marketing of the product  
15:42 has to be done in tandem with that  
15:46 in the hemp cooperative two places the



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990 15:49 members are farmers  
991 15:51 but we have builders we have chemists  
992 15:53 doctors  
993 15:54 architects social activists people  
994 15:58 who want solutions to the problem in  
995 16:01 society  
996  
997  
998 **1.13. VIDEO Declan Darcy hempcrete builder and**  
999 **board member of Hemp Cooperative Ireland**  
1000  
1001 16:03 I first got involved with him as I'm a  
1002 16:06 carpenter by trade and a customer asked  
1003 16:08 me to build a hempcrete  
1004 16:10 extension to their house so I've done  
1005 16:13 some research  
1006 16:14 and discovered a wonderful building  
1007 16:16 material this is just  
1008 16:17 a simple mixture the shiv mixed with  
1009 16:20 live on water  
1010 16:22 and it packed into these wooden  
1011 16:26 cranes and it's just like you would with  
1012 16:30 a concrete wall  
1013 16:31 but you just pack it down so it becomes  
1014 16:34 a solid block  
1015 16:36 like this so this material will  
1016 16:39 create a good quality installation  
1017 16:42 that's a good one  
1018 16:43 you know for the installation for the  
1019 16:44 help of the people living in these  
1020 16:45 buildings  
1021 16:46 but for the help of the building itself  
1022 16:48 as well this is the blocks  
1023 16:50 we showed people how to make you could  
1024 16:52 imagine  
1025 16:53 an industry near an island producing  
1026 16:56 hemp creek blasts for people  
1027 16:58 when i discovered him i discovered  
1028 17:00 something passionate about it  
1029 17:02 you know finally i find something that  
1030 17:04 walks the top  
1031 17:06 the hemp cooperative was actually  
1032 17:08 registered in may  
1033 17:10 2018 and then several of us  
1034 17:13 registered it you know it all started  
1035 17:15 taking off  
1036 17:16 so we've gathered a lot of members most  
1037 17:19 of our members  
1038 17:20 are young farmers they want to farm they  
1039 17:23 don't want to be driven away from the  
1040 17:25 city  
1041 17:26 the young people are looking to do  
1042 17:28 something different  
1043 17:30 and see this as a very exciting crop  
1044

17:33 that offers lots of opportunities we do  
17:36 it organically  
17:37 and so it's regenerative farming and  
17:40 young people  
17:40 are interested in farming for nature  
17:44 I think we need to  
17:46 reinvent the paradigm of rural islands  
17:49 and just make it an exciting and vibrant  
17:52 place again  
17:53 and to me hemp will do that  
17:57 industrial hemp is a significant game  
17:59 changer  
18:00 in terms of not depopulating border  
18:04 i would call it a flagship project  
18:08 for the whole European union