1

00:00:00,690 --> 00:00:04,050

[Music]

2

00:00:02,020 --> 00:00:09,920

[Applause]

3

00:00:04,050 --> 00:00:12,480

[Music]

4

00:00:09,920 --> 00:00:15,280

Hello and welcome. You're listening to

5

00:00:12,480 --> 00:00:17,760

episode 52 of Ear to the Ground, the

6

00:00:15,280 --> 00:00:20,160

agricultural podcast brought to you by

7

00:00:17,760 --> 00:00:22,800

Farming Connect, supporting Welsh farmers

8

00:00:20,160 --> 00:00:24,480

to adapt and thrive. I'm your host, Aled

9

00:00:22,800 --> 00:00:26,880

Jones, and today we're going to be

10

00:00:24,480 --> 00:00:28,560

discussing carbon trading. It's a hot

11

00:00:26,880 --> 00:00:30,480

topic at the moment. It's had a lot of

12

00:00:28,560 --> 00:00:32,559

attention recently, particularly on the

13

00:00:30,480 --> 00:00:34,719

back of COP26,

14

00:00:32,559 --> 00:00:36,480

but how does it work? How can farmers

15

00:00:34,719 --> 00:00:38,960

potentially benefit from trading or

16

00:00:36,480 --> 00:00:41,360

taking part in offset schemes? And

17

00:00:38,960 --> 00:00:43,760

crucially, are there any pitfalls that we

18

00:00:41,360 --> 00:00:45,600

should be aware of? Here to tackle

19

00:00:43,760 --> 00:00:48,640

these questions, I'm joined by Dr Will

20

00:00:45,600 --> 00:00:50,800

Stiles of Aberystwyth University. Will is

21

00:00:48,640 --> 00:00:53,520

a lecturer for BioInnovation Wales and

22

00:00:50,800 --> 00:00:55,760

leads the Knowledge Exchange Hub in IBERS

23

00:00:53,520 --> 00:00:57,600

for Farming Connect. He divides his time

24

00:00:55,760 --> 00:00:59,680

between coordinating postgraduate

25

00:00:57,600 --> 00:01:01,600

modules on controlled environment

26

00:00:59,680 --> 00:01:03,440

agriculture and waste resource

27

00:01:01,600 --> 00:01:05,600

management, and coordinating the

28

00:01:03,440 --> 00:01:07,600

provision of scientific support for the

29

00:01:05,600 --> 00:01:09,920

Farming Connect programme from the

30

00:01:07,600 --> 00:01:12,240

Knowledge Exchange Hub. Will has a

31

00:01:09,920 --> 00:01:13,920

background in soil science and ecology,

32

00:01:12,240 --> 00:01:15,920

and his research looks for ways to

33

00:01:13,920 --> 00:01:18,080

reduce the environmental impact of

34

00:01:15,920 --> 00:01:20,560

agriculture and make farming and food

35

00:01:18,080 --> 00:01:23,040

production more sustainable. Will,

36

00:01:20,560 --> 00:01:25,520

welcome to the podcast.

37

00:01:23,040 --> 00:01:29,040

Before we dive into the detail, why is

38

00:01:25,520 --> 00:01:32,159

this such a hot topic at the moment?

39

00:01:29,040 --> 00:01:33,600

I suppose it is the topic that's almost

40

00:01:32,159 --> 00:01:36,479

on everyone's lips at this minute in

41

00:01:33,600 --> 00:01:38,799

time. COP26 has meant that it's

42

00:01:36,479 --> 00:01:40,880

dominated our news. It's literally

43

00:01:38,799 --> 00:01:43,520

everywhere in the media, and this

44

00:01:40,880 --> 00:01:46,799

comes on the back of the very recently

45

00:01:43,520 --> 00:01:49,439

published IPCC report, or the Intergovernmental

46

00:01:46,799 --> 00:01:51,680

Panel on Climate Change, which is the big

47

00:01:49,439 --> 00:01:54,240

international body of scientists on

48

00:01:51,680 --> 00:01:56,479

behalf of the UN, which have spent

49

00:01:54,240 --> 00:01:59,439

the last 15 years, or it might be

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00:01:56,479 --> 00:02:02,000

20 years now, considering the

51

00:01:59,439 --> 00:02:02,799

implications of climate change for us

52

00:02:02,000 --> 00:02:04,240

all.

53

00:02:02,799 --> 00:02:06,640

Their reports

54

00:02:04,240 --> 00:02:08,640

are published periodically and they

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00:02:06,640 --> 00:02:10,720

update where we are with the science.

56

00:02:08,640 --> 00:02:13,040

And the last report,

57

00:02:10,720 --> 00:02:15,360

to say a strong call to action would be

58

00:02:13,040 --> 00:02:17,520

somewhat of an understatement. The

59

00:02:15,360 --> 00:02:20,800

chances now of staying underneath the

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00:02:17,520 --> 00:02:22,959

1.5°C target, which is widely

61

00:02:20,800 --> 00:02:25,360

considered to be the threshold we have

62

00:02:22,959 --> 00:02:28,720

to stay beneath to avoid the worst

63

00:02:25,360 --> 00:02:30,800

possible scenarios for climate change, is

64

00:02:28,720 --> 00:02:32,319

going to be highly challenging, and the

65

00:02:30,800 --> 00:02:34,879

very great likelihood is that we're

66

00:02:32,319 --> 00:02:38,959

going to get towards 1.5°C by

67

00:02:34,879 --> 00:02:41,200

2030-2050, which is within

68

00:02:38,959 --> 00:02:43,599

most of our lifetimes.

69

00:02:41,200 --> 00:02:45,440

There will be consequences to the world

70

00:02:43,599 --> 00:02:47,280

as we know it currently

71

00:02:45,440 --> 00:02:50,160

72

00:02:47,280 --> 00:02:52,080

if we get to that sort of level of heat

73

00:02:50,160 --> 00:02:53,280

increase or energy in the system

74

00:02:52,080 --> 00:02:56,000

increase,

75

00:02:53,280 --> 00:02:58,319

and that's why I think it is

76

00:02:56,000 --> 00:03:00,159

so topical at the moment. We are now,

77

00:02:58,319 --> 00:03:03,840

for all intents and purposes, in the end

78

00:03:00,159 --> 00:03:05,920

game for the opportunities to make a

79

00:03:03,840 --> 00:03:07,680

change. Whilst climate change is going to be

80

00:03:05,920 --> 00:03:08,879

something which acts over the next

81

00:03:07,680 --> 00:03:10,480

century,

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00:03:08,879 --> 00:03:13,360

the ability to do something about

83

00:03:10,480 --> 00:03:15,680

climate change is now. If we're not

84

00:03:13,360 --> 00:03:18,239

actually making meaningful changes at

85

00:03:15,680 --> 00:03:20,239

this moment in time, then we're going to

86

00:03:18,239 --> 00:03:23,280

struggle – in actual fact we will be

87

00:03:20,239 --> 00:03:25,680

unable to manage the full effects of

88

00:03:23,280 --> 00:03:27,920

climate change, particularly if we get

89

00:03:25,680 --> 00:03:32,400

the worst possible versions of climate

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00:03:27,920 --> 00:03:34,720

change, i.e., warming above 1.5°C.

91

00:03:32,400 --> 00:03:37,840

What are the consequences if we fail

92

00:03:34,720 --> 00:03:39,760

to limit that warming to 1.5°C?

93

00:03:37,840 --> 00:03:41,200

If it does run away with us,

94

00:03:39,760 --> 00:03:42,959

what impact will that have

95

00:03:41,200 --> 00:03:44,080

on agriculture and wider

96

00:03:42,959 --> 00:03:45,360

than that?

97

00:03:44,080 --> 00:03:47,280

It would

98

00:03:45,360 --> 00:03:50,400

fundamentally change the world as we

99

00:03:47,280 --> 00:03:52,720

know it. From my particular research

100

00:03:50,400 --> 00:03:54,159

interests and my particular expertise,

101

00:03:52,720 --> 00:03:57,280

if you're talking in terms of food

102

00:03:54,159 --> 00:03:59,280

production, then there is genuine concern

103

00:03:57,280 --> 00:04:02,239

that it may make food production

104

00:03:59,280 --> 00:04:05,120

incredibly difficult to do.

105

00:04:02,239 --> 00:04:08,159

Climate change won't be a linear thing.

106

00:04:05,120 --> 00:04:10,319

It won't be a gradual increase in

107

00:04:08,159 --> 00:04:13,120

sort of temperatures or otherwise, it

108

00:04:10,319 --> 00:04:15,120

will be the increase in freak events.

109

00:04:13,120 --> 00:04:17,840

That is probably a better way to try

110

00:04:15,120 --> 00:04:20,000

and picture it. If you imagine

111

00:04:17,840 --> 00:04:21,919

112

00:04:20,000 --> 00:04:23,919

weather events, such as the ‘Beast from

113

00:04:21,919 --> 00:04:26,080

the East’ that we had a few years ago, or extreme

114

00:04:23,919 --> 00:04:27,680

rainfall events that result in flooding,

115

00:04:26,080 --> 00:04:29,680

all of these which

116

00:04:27,680 --> 00:04:31,919

previously happened every 50 to 100

117

00:04:29,680 --> 00:04:33,680

years would be considered freak and

118

00:04:31,919 --> 00:04:34,320

almost passed down through generations

119

00:04:33,680 --> 00:04:37,600

as

120

00:04:34,320 --> 00:04:40,479

a fable almost. These will become much

121

00:04:37,600 --> 00:04:42,080

more common as in almost annual events.

122

00:04:40,479 --> 00:04:43,919

In the context of something like

123

00:04:42,080 --> 00:04:47,120

food production, when you're talking

124

00:04:43,919 --> 00:04:50,479

nationwide food security, that presents

125

00:04:47,120 --> 00:04:52,240

enormous and quite concerning challenges.

126

00:04:50,479 --> 00:04:54,639

In this part of the world and in Wales, we're

127

00:04:52,240 --> 00:04:55,919

extremely lucky. The worst

128

00:04:54,639 --> 00:04:58,560

effects of climate change for us are

129

00:04:55,919 --> 00:05:01,199

likely to manifest as higher rainfall,

130

00:04:58,560 --> 00:05:02,960

which of the two options, higher or lower

131

00:05:01,199 --> 00:05:05,280

rainfall, I would suggest that's probably

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00:05:02,960 --> 00:05:06,240

the preferable one with access to water being

133

00:05:05,280 --> 00:05:08,000

a very

134

00:05:06,240 --> 00:05:10,240

essential fundamental of food production

135

00:05:08,000 --> 00:05:12,560

and general human well-being, but

136

00:05:10,240 --> 00:05:14,479

elsewhere in the world, the warmer

137

00:05:12,560 --> 00:05:16,800

regions as they are currently,

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00:05:14,479 --> 00:05:18,560

droughts are going to become extremely

139

00:05:16,800 --> 00:05:20,320

likely, and we know historically that

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00:05:18,560 --> 00:05:22,320

drought tends to lead to harvest

141

00:05:20,320 --> 00:05:24,639

collapse and famine.

142

00:05:22,320 --> 00:05:26,800

That, for a large proportion of the

143

00:05:24,639 --> 00:05:28,639

population of the world, presents a

144

00:05:26,800 --> 00:05:30,880

genuine danger.

145

00:05:28,639 --> 00:05:32,000

At that point you've got, well,

146

00:05:30,880 --> 00:05:34,160

how do we start talking about

147

00:05:32,000 --> 00:05:36,479

socioeconomic breakdown as a consequence

148

00:05:34,160 --> 00:05:39,440

of widespread famine, mass migration,

149

00:05:36,479 --> 00:05:41,840

people moving and sea level rise?

150

00:05:39,440 --> 00:05:44,720

The endless ways that you can start

151

00:05:41,840 --> 00:05:47,360

talking about the catastrophic

152

00:05:44,720 --> 00:05:48,800

effects become very, very concerning very,

153

00:05:47,360 --> 00:05:51,039

very quickly.

154

00:05:48,800 --> 00:05:54,240

There are also secondary things which

155

00:05:51,039 --> 00:05:55,919

are a bit harder to quantify as real

156

00:05:54,240 --> 00:05:57,759

potentials, but

157

00:05:55,919 --> 00:05:59,759

as somebody who works in the

158

00:05:57,759 --> 00:06:01,360

field, they do concern me, the

159

00:05:59,759 --> 00:06:04,319

potential for passing things like

160

00:06:01,360 --> 00:06:07,120

critical tipping points whereby the act

161

00:06:04,319 --> 00:06:09,919

of warming itself facilitates more

162

00:06:07,120 --> 00:06:12,560

warming in a positive

163

00:06:09,919 --> 00:06:14,240

feedback mechanism. For instance, one

164

00:06:12,560 --> 00:06:16,880

of the great examples would be

165

00:06:14,240 --> 00:06:18,960

permafrost melting and methane getting

166

00:06:16,880 --> 00:06:20,639

released. It's not quite as

167

00:06:18,960 --> 00:06:23,680

straightforward a model as that, but if

168

00:06:20,639 --> 00:06:25,919

we use that just as an example then

169

00:06:23,680 --> 00:06:28,400

you can imagine that just by virtue of

170

00:06:25,919 --> 00:06:30,800

having a changing climate, we force more

171

00:06:28,400 --> 00:06:34,000

gas into the atmosphere in an ever

172

00:06:30,800 --> 00:06:36,319

increasing effect, and that could

173

00:06:34,000 --> 00:06:38,560

facilitate global collapse.

174

00:06:36,319 --> 00:06:41,280

I think understating at

175

00:06:38,560 --> 00:06:44,400

this stage is a mistake to do.

176

00:06:41,280 --> 00:06:45,759

We absolutely have to start managing

177

00:06:44,400 --> 00:06:47,120

gaseous

178

00:06:45,759 --> 00:06:49,039

greenhouse gas

179

00:06:47,120 --> 00:06:51,599

concentrations in the atmosphere as

180

00:06:49,039 --> 00:06:54,080

quickly as we possibly can.

181

00:06:51,599 --> 00:06:56,240

The way of going about and tackling

182

00:06:54,080 --> 00:06:58,319

this problem is twofold in essence; one

183

00:06:56,240 --> 00:07:00,319

is all industries have to look at ways

184

00:06:58,319 --> 00:07:02,400

to reduce their emissions,

185

00:07:00,319 --> 00:07:04,319

and secondly, looking at ways to

186

00:07:02,400 --> 00:07:07,360

sequester more carbon, and that's

187

00:07:04,319 --> 00:07:09,599

where agriculture and farming can

188

00:07:07,360 --> 00:07:11,360

particularly play quite a valuable and

189

00:07:09,599 --> 00:07:14,080

crucial role.

190

00:07:11,360 --> 00:07:16,160

Indeed. Quite classically,

191

00:07:14,080 --> 00:07:18,319

if you're talking about drawing carbon

192

00:07:16,160 --> 00:07:20,639

out of the atmosphere

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00:07:18,319 --> 00:07:23,280

then the obvious way to do so is to use

194

00:07:20,639 --> 00:07:25,680

the organisms that are evolved to do

195

00:07:23,280 --> 00:07:28,400

just this. Plants via the process of

196

00:07:25,680 --> 00:07:30,880

photosynthesis take water and carbon

197

00:07:28,400 --> 00:07:32,800

dioxide and turn it into oxygen and

198

00:07:30,880 --> 00:07:35,919

carbohydrates, and the carbohydrates are

199

00:07:32,800 --> 00:07:38,639

obviously food and sugars, which they store

200

00:07:35,919 --> 00:07:40,720

inside their own biomass. The plant grows

201

00:07:38,639 --> 00:07:42,880

and the carbon

202

00:07:40,720 --> 00:07:46,000

is sequestered as that organism

203

00:07:42,880 --> 00:07:47,440

grows and that material is then out of

204

00:07:46,000 --> 00:07:49,599

the atmosphere.

205

00:07:47,440 --> 00:07:51,840

It's not permanent sequestration because

206

00:07:49,599 --> 00:07:54,960

the minute that plant dies,

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00:07:51,840 --> 00:07:57,360

a portion, mostly all of it really

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00:07:54,960 --> 00:08:00,319

is going to get broken down, rotted away,

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00:07:57,360 --> 00:08:02,720

and the CO2 or the carbon itself will be

210

00:08:00,319 --> 00:08:04,960

cycled back into the atmosphere.

211

00:08:02,720 --> 00:08:06,560

That said, some of the organism’s material

212

00:08:04,960 --> 00:08:08,400

(particularly if it's a plant with roots

213

00:08:06,560 --> 00:08:10,639

into the soil) may be stable in the long

214

00:08:08,400 --> 00:08:13,120

term and not all of it will get broken down,

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00:08:10,639 --> 00:08:14,639

and that is long-term sequestration.

216

00:08:13,120 --> 00:08:16,240

Regardless,

217

00:08:14,639 --> 00:08:18,560

218

00:08:16,240 --> 00:08:20,560

even carbon taken out of the

219

00:08:18,560 --> 00:08:21,840

atmosphere in the short-term, and short-term

220

00:08:20,560 --> 00:08:23,759

could be anything. If you're

221

00:08:21,840 --> 00:08:26,560

talking broadly forestry, it might be up

222

00:08:23,759 --> 00:08:28,879

to 500 years, but still in a planetary

223

00:08:26,560 --> 00:08:31,599

context, that is still short-term,

224

00:08:28,879 --> 00:08:33,440

but that does remove it from the cycle

225

00:08:31,599 --> 00:08:35,039

or the active atmosphere

226

00:08:33,440 --> 00:08:36,719

at any one point in time, which would

227

00:08:35,039 --> 00:08:38,800

reduce the effect.

228

00:08:36,719 --> 00:08:40,800

We could facilitate a lot more of

229

00:08:38,800 --> 00:08:43,360

that with agriculture. In the UK for

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00:08:40,800 --> 00:08:45,760

instance, we have about 13%

231

00:08:43,360 --> 00:08:47,360

woodland or tree cover, whereas if you

232

00:08:45,760 --> 00:08:50,399

take Europe as an example, they've got

233

00:08:47,360 --> 00:08:53,040

roughly around 35% on average of tree

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00:08:50,399 --> 00:08:55,680

cover. We could increase our tree

235

00:08:53,040 --> 00:08:58,160

coverage in the UK quite a lot just

236

00:08:55,680 --> 00:09:00,480

to come up to comparable standards

237

00:08:58,160 --> 00:09:02,959

on the continent.

238

00:09:00,480 --> 00:09:05,279

We do hear a lot about tree planting

239

00:09:02,959 --> 00:09:06,720

as being one of the tools to sequester,

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00:09:05,279 --> 00:09:08,959

but there are other options as well,

241

00:09:06,720 --> 00:09:11,040

other ways in which carbon can be taken

242

00:09:08,959 --> 00:09:12,640

out of the atmosphere by actions on the

243

00:09:11,040 --> 00:09:14,560

ground by farmers.

244

00:09:12,640 --> 00:09:17,200

Most certainly, and

245

00:09:14,560 --> 00:09:19,120

I would agree with you.

246

00:09:17,200 --> 00:09:21,120

Tree planting does come in many

247

00:09:19,120 --> 00:09:23,760

different forms. It doesn't have to be

248

00:09:21,120 --> 00:09:25,680

solid banks of woodland or forestry, it

249

00:09:23,760 --> 00:09:28,080

could be the integration of trees back

250

00:09:25,680 --> 00:09:30,000

into our systems, such as

251

00:09:28,080 --> 00:09:32,240

agroforestry,

252

00:09:30,000 --> 00:09:33,600

where you could have relatively dense

253

00:09:32,240 --> 00:09:35,680

tree planting and still maintain

254

00:09:33,600 --> 00:09:37,839

grassland production,

255

00:09:35,680 --> 00:09:40,320

dense in a relative term of course,

256

00:09:37,839 --> 00:09:41,839

not as in plantation forestry, but

257

00:09:40,320 --> 00:09:44,000

you can certainly have quite a lot of

258

00:09:41,839 --> 00:09:45,839

trees in that environment and still have

259

00:09:44,000 --> 00:09:48,880

grass that's able to grow.

260

00:09:45,839 --> 00:09:51,040

You can also have the

261

00:09:48,880 --> 00:09:53,120

increase of tree and hedgerow cover

262

00:09:51,040 --> 00:09:54,800

within sort of boundaries. We've got rid

263

00:09:53,120 --> 00:09:57,360

of an awful lot of our hedgerows

264

00:09:54,800 --> 00:09:59,839

and we could have a programme of

265

00:09:57,360 --> 00:10:02,640

re-instigating those. I would suggest

266

00:09:59,839 --> 00:10:03,440

these are very beneficial things to

267

00:10:02,640 --> 00:10:05,920

do,

268

00:10:03,440 --> 00:10:08,640

largely for wildlife and for on-farm

269

00:10:05,920 --> 00:10:10,720

biodiversity as much as anything else.

270

00:10:08,640 --> 00:10:14,079

They are only

271

00:10:10,720 --> 00:10:16,880

sort of mild or very modest

272

00:10:14,079 --> 00:10:19,440

adaptation techniques, or

273

00:10:16,880 --> 00:10:22,160

‘mitigation’ is a better phrase, rather,

274

00:10:19,440 --> 00:10:24,959

for the issue of climate

275

00:10:22,160 --> 00:10:26,959

change. Nevertheless, a thousand

276

00:10:24,959 --> 00:10:28,959

improvements are a good way to

277

00:10:26,959 --> 00:10:30,720

manage a system in that regard. If we can

278

00:10:28,959 --> 00:10:33,040

improve everything by

279

00:10:30,720 --> 00:10:34,640

1%, then perhaps we have an

280

00:10:33,040 --> 00:10:36,880

overall net gain.

281

00:10:34,640 --> 00:10:39,440

It is also possible to sequester more

282

00:10:36,880 --> 00:10:42,160

carbon into soil. This becomes quite a

283

00:10:39,440 --> 00:10:44,480

difficult thing. Soil is a

284

00:10:42,160 --> 00:10:46,480

tricky medium to work with. We've hoped

285

00:10:44,480 --> 00:10:48,800

in the past that we could get lots and

286

00:10:46,480 --> 00:10:50,880

lots of carbon into soil, and that

287

00:10:48,800 --> 00:10:53,360

could be one of our saviours moving

288

00:10:50,880 --> 00:10:55,920

forward. In reality, I think

289

00:10:53,360 --> 00:10:58,480

that’s rather unlikely. Soil

290

00:10:55,920 --> 00:11:00,959

is a very dynamic system. It sits in

291

00:10:58,480 --> 00:11:03,200

equilibrium. If you have high carbon

292

00:11:00,959 --> 00:11:06,640

inputs, you tend to have high carbon

293

00:11:03,200 --> 00:11:09,120

outputs, i.e., you will have a much more

294

00:11:06,640 --> 00:11:11,440

robust decomposer community. They will

295

00:11:09,120 --> 00:11:13,200

be more active and they will emit more

296

00:11:11,440 --> 00:11:14,880

carbon consequently and they'll essentially

297

00:11:13,200 --> 00:11:17,680

respire

298

00:11:14,880 --> 00:11:20,079

CO2 as they're going about large amounts

299

00:11:17,680 --> 00:11:22,079

of activity. That said, just like the

300

00:11:20,079 --> 00:11:24,000

forestry, if you've got a large amount of

301

00:11:22,079 --> 00:11:25,360

input and a large amount of output, you

302

00:11:24,000 --> 00:11:26,640

have overall

303

00:11:25,360 --> 00:11:28,399

a

304

00:11:26,640 --> 00:11:30,240

a larger sink

305

00:11:28,399 --> 00:11:31,120

at any one point in time, if that makes

306

00:11:30,240 --> 00:11:33,279

sense?

307

00:11:31,120 --> 00:11:34,880

There are good benefits of doing so,

308

00:11:33,279 --> 00:11:37,360

plus increasing soil organic

309

00:11:34,880 --> 00:11:39,519

matter would improve overall soil health,

310

00:11:37,360 --> 00:11:42,640

and a lot of our

311

00:11:39,519 --> 00:11:44,800

soils are degraded. That’s less true

312

00:11:42,640 --> 00:11:47,120

for us here in Wales. We're not

313

00:11:44,800 --> 00:11:49,040

absolved of this by any means, but if you

314

00:11:47,120 --> 00:11:51,040

to take a comparison with arable

315

00:11:49,040 --> 00:11:53,440

agriculture in the East for instance,

316

00:11:51,040 --> 00:11:55,120

then our soils are in a much better

317

00:11:53,440 --> 00:11:56,959

state overall than you would expect to

318

00:11:55,120 --> 00:11:59,839

see there.

319

00:11:56,959 --> 00:12:02,079

Restoring degraded soils does offer an

320

00:11:59,839 --> 00:12:03,600

opportunity to sequester an awful lot of

321

00:12:02,079 --> 00:12:06,639

carbon. If we shift our management

322

00:12:03,600 --> 00:12:08,560

away from intensive practices, and if I take

323

00:12:06,639 --> 00:12:09,920

grassland agriculture as an example, if

324

00:12:08,560 --> 00:12:12,720

we start

325

00:12:09,920 --> 00:12:15,760

farming for mixed species grasslands,

326

00:12:12,720 --> 00:12:17,920

the more classic meadow type pasture

327

00:12:15,760 --> 00:12:20,000

which isn't ploughed up every year, isn't

328

00:12:17,920 --> 00:12:22,560

reseeded and isn't

329

00:12:20,000 --> 00:12:24,959

subject to high levels of nitrogen being

330

00:12:22,560 --> 00:12:27,279

added to it all the time, then that is a

331

00:12:24,959 --> 00:12:29,519

very different way of farming in that

332

00:12:27,279 --> 00:12:31,279

regard, and the greenhouse gas emissions,

333

00:12:29,519 --> 00:12:34,160

nitrous oxide consequently being one of

334

00:12:31,279 --> 00:12:37,680

them from nitrogen fertiliser usage,

335

00:12:34,160 --> 00:12:39,680

would then reduce the

336

00:12:37,680 --> 00:12:42,399

overall impact. It's a more

337

00:12:39,680 --> 00:12:44,720

holistic way of managing farming.

338

00:12:42,399 --> 00:12:45,920

From that point of view, that is

339

00:12:44,720 --> 00:12:48,480

something we should be doing as an

340

00:12:45,920 --> 00:12:50,160

industry. That is very difficult to trade

341

00:12:48,480 --> 00:12:52,639

on though if you're talking about actual

342

00:12:50,160 --> 00:12:54,639

carbon trading or carbon offsetting,

343

00:12:52,639 --> 00:12:57,839

because these are

344

00:12:54,639 --> 00:12:59,839

optimal practices, but as we

345

00:12:57,839 --> 00:13:00,800

start talking about reducing livestock

346

00:12:59,839 --> 00:13:02,480

numbers,

347

00:13:00,800 --> 00:13:03,680

rightly or wrongly, people can

348

00:13:02,480 --> 00:13:05,040

have their own opinions on whether they

349

00:13:03,680 --> 00:13:06,880

think that's the right thing to do, but

350

00:13:05,040 --> 00:13:08,560

that is a strategy on a government level

351

00:13:06,880 --> 00:13:11,360

which is being advised.

352

00:13:08,560 --> 00:13:13,680

If we shift to a paradigm of less meat

353

00:13:11,360 --> 00:13:16,560

but better quality, then perhaps we can

354

00:13:13,680 --> 00:13:17,600

facilitate a farming system whereby

355

00:13:16,560 --> 00:13:18,880

we have

356

00:13:17,600 --> 00:13:21,760

more

357

00:13:18,880 --> 00:13:22,720

low intensity management, if that's a

358

00:13:21,760 --> 00:13:25,200

phrase

359

00:13:22,720 --> 00:13:26,399

that works to cover that adequately,

360

00:13:25,200 --> 00:13:28,480

and we raise

361

00:13:26,399 --> 00:13:30,320

livestock on multi-species pasture with high

362

00:13:28,480 --> 00:13:33,600

biodiversity which has got a higher

363

00:13:30,320 --> 00:13:35,839

carbon value overall in the soil.

364

00:13:33,600 --> 00:13:37,440

Let's turn our attention to

365

00:13:35,839 --> 00:13:39,360

carbon trading. As we mentioned right at the

366

00:13:37,440 --> 00:13:41,199

very beginning in the introduction, it is

367

00:13:39,360 --> 00:13:43,040

something that's had a lot of

368

00:13:41,199 --> 00:13:44,560

attention recently, and indeed

369

00:13:43,040 --> 00:13:46,160

during COP26, there's been a

370

00:13:44,560 --> 00:13:48,399

number of discussions around

371

00:13:46,160 --> 00:13:51,040

interpretation of what exactly

372

00:13:48,399 --> 00:13:53,040

it is, and how it operates.

373

00:13:51,040 --> 00:13:56,240

From your perspective, Will, how would you

374

00:13:53,040 --> 00:13:58,720

describe carbon trading to somebody?

375

00:13:56,240 --> 00:14:02,000

There are a couple of systems.

376

00:13:58,720 --> 00:14:05,360

The obvious one to pick on first is the

377

00:14:02,000 --> 00:14:08,079

the nationwide cap-and-trade system,

378

00:14:05,360 --> 00:14:10,240

which is the emissions trading scheme.

379

00:14:08,079 --> 00:14:12,639

By cap-and-trade, what they mean is

380

00:14:10,240 --> 00:14:15,920

it's a governmental programme which is

381

00:14:12,639 --> 00:14:18,240

designed to reduce emissions in a

382

00:14:15,920 --> 00:14:19,839

gradual manner by

383

00:14:18,240 --> 00:14:22,240

incrementally

384

00:14:19,839 --> 00:14:26,720

lowering the amount that an

385

00:14:22,240 --> 00:14:29,120

industry is allowed to produce. All

386

00:14:26,720 --> 00:14:31,839

certain industries, very energy-hungry

387

00:14:29,120 --> 00:14:35,279

ones, such as power generation,

388

00:14:31,839 --> 00:14:37,839

aviation and things like that, they

389

00:14:35,279 --> 00:14:39,760

can be regulated by

390

00:14:37,839 --> 00:14:41,920

limiting the

391

00:14:39,760 --> 00:14:44,320

amount of emissions that they are

392

00:14:41,920 --> 00:14:46,320

allowed to produce every year. A

393

00:14:44,320 --> 00:14:49,600

business, for instance, could be told that

394

00:14:46,320 --> 00:14:51,440

it has an allowance of x.

395

00:14:49,600 --> 00:14:54,480

If it can meet that allowance, then

396

00:14:51,440 --> 00:14:57,440

that's absolutely fine, but if it needs to

397

00:14:54,480 --> 00:15:01,120

exceed that, then in an open auction

398

00:14:57,440 --> 00:15:02,320

system it can buy access to more carbon

399

00:15:01,120 --> 00:15:04,880

allowance.

400

00:15:02,320 --> 00:15:06,959

Basically, what this forces the

401

00:15:04,880 --> 00:15:10,720

industry and collection of energy-

402

00:15:06,959 --> 00:15:13,519

hungry industries to do is to

403

00:15:10,720 --> 00:15:15,360

advance more rapidly

404

00:15:13,519 --> 00:15:16,959

in their ability to lower their

405

00:15:15,360 --> 00:15:18,800

emissions, and if they don't, there's a

406

00:15:16,959 --> 00:15:22,160

cost, and if they do, there's the

407

00:15:18,800 --> 00:15:24,480

potential to make money. You allow the

408

00:15:22,160 --> 00:15:27,600

marketplace itself

409

00:15:24,480 --> 00:15:30,240

to regulate itself, i.e., the

410

00:15:27,600 --> 00:15:32,079

principles of a free market competition

411

00:15:30,240 --> 00:15:34,560

means that somebody will get better

412

00:15:32,079 --> 00:15:36,880

quicker and somebody will be slower.

413

00:15:34,560 --> 00:15:39,360

The slower ones will face a financial

414

00:15:36,880 --> 00:15:40,480

penalty and the faster ones will face a

415

00:15:39,360 --> 00:15:41,920

financial

416

00:15:40,480 --> 00:15:43,519

opportunity.

417

00:15:41,920 --> 00:15:46,000

These two things together mean that

418

00:15:43,519 --> 00:15:47,839

you're overall gradually reducing.

419

00:15:46,000 --> 00:15:51,279

What it also means is

420

00:15:47,839 --> 00:15:54,079

you can chart out the direction

421

00:15:51,279 --> 00:15:56,240

towards net-zero in 2050 and show

422

00:15:54,079 --> 00:15:59,199

industries where

423

00:15:56,240 --> 00:16:01,920

their

424

00:15:59,199 --> 00:16:04,000

emissions limits will be year on year.

425

00:16:01,920 --> 00:16:05,519

If you're not meeting it this year, the

426

00:16:04,000 --> 00:16:08,000

likelihood is you're going to find it

427

00:16:05,519 --> 00:16:09,600

even harder to meet it next year.

428

00:16:08,000 --> 00:16:11,680

Ultimately, that might mean that

429

00:16:09,600 --> 00:16:13,360

some organisations that are

430

00:16:11,680 --> 00:16:15,279

heavy polluters

431

00:16:13,360 --> 00:16:18,399

will eventually cease to be, because they

432

00:16:15,279 --> 00:16:20,000

become too financially unstable or

433

00:16:18,399 --> 00:16:21,600

uncompetitive.

434

00:16:20,000 --> 00:16:24,079

That doesn't apply to agriculture.

435

00:16:21,600 --> 00:16:26,880

Yes, I would stress that the

436

00:16:24,079 --> 00:16:30,399

cap-and-trade is very much

437

00:16:26,880 --> 00:16:32,720

working just with certain

438

00:16:30,399 --> 00:16:34,560

energy-hungry industries at this

439

00:16:32,720 --> 00:16:36,560

minute in time, particularly the power

440

00:16:34,560 --> 00:16:38,000

generation sector and aviation. It

441

00:16:36,560 --> 00:16:41,040

would be very difficult to implement

442

00:16:38,000 --> 00:16:44,079

this for agriculture, in actual fact,

443

00:16:41,040 --> 00:16:46,320

but there are other systems that will

444

00:16:44,079 --> 00:16:48,320

apply to agriculture in due course,

445

00:16:46,320 --> 00:16:50,959

particularly people trying to pay

446

00:16:48,320 --> 00:16:53,040

farmers to sequester carbon for them.

447

00:16:50,959 --> 00:16:55,040

Having talked about carbon trading,

448

00:16:53,040 --> 00:16:57,199

what's the difference between trading

449

00:16:55,040 --> 00:16:58,639

and carbon offsetting? Are they two

450

00:16:57,199 --> 00:17:01,279

different terms for the same thing, or are

451

00:16:58,639 --> 00:17:03,360

they completely different schemes?

452

00:17:01,279 --> 00:17:05,199

They are

453

00:17:03,360 --> 00:17:06,079

entirely different.

454

00:17:05,199 --> 00:17:10,000

455

00:17:06,079 --> 00:17:12,000

The trading system is

456

00:17:10,000 --> 00:17:15,199

a governed system whereby

457

00:17:12,000 --> 00:17:17,280

there are target allowances. There is a

458

00:17:15,199 --> 00:17:19,520

very

459

00:17:17,280 --> 00:17:21,919

regulated auction system which happens

460

00:17:19,520 --> 00:17:24,000

every Wednesday, and there is a set of

461

00:17:21,919 --> 00:17:26,079

legal constraints. Not everyone can be

462

00:17:24,000 --> 00:17:29,200

part of it. You have to apply officially.

463

00:17:26,079 --> 00:17:31,360

There is very much

464

00:17:29,200 --> 00:17:33,039

a framework surrounding that. The

465

00:17:31,360 --> 00:17:35,760

offsetting system

466

00:17:33,039 --> 00:17:37,200

is a bit more

467

00:17:35,760 --> 00:17:39,760

of a new thing, and as a

468

00:17:37,200 --> 00:17:41,679

consequence, it is slightly precarious.

469

00:17:39,760 --> 00:17:43,760

It’s bigger in other countries. In America,

470

00:17:41,679 --> 00:17:46,559

for instance, there are lots and lots

471

00:17:43,760 --> 00:17:49,760

of private organisations that are

472

00:17:46,559 --> 00:17:52,000

facilitating offsetting agendas

473

00:17:49,760 --> 00:17:53,919

and is partially regulated, and some of

474

00:17:52,000 --> 00:17:56,240

these things are acknowledged at

475

00:17:53,919 --> 00:17:58,000

government level and

476

00:17:56,240 --> 00:18:00,880

are

477

00:17:58,000 --> 00:18:01,840

verified as such. Somebody will

478

00:18:00,880 --> 00:18:03,840

come out and take a couple of

479

00:18:01,840 --> 00:18:05,679

measurements and conclude that they are

480

00:18:03,840 --> 00:18:08,559

doing what they're doing, but it does

481

00:18:05,679 --> 00:18:10,320

feel very much like a

482

00:18:08,559 --> 00:18:11,840

wild west, should we

483

00:18:10,320 --> 00:18:14,400

say, at the moment.

484

00:18:11,840 --> 00:18:17,679

Offsetting itself comes in a

485

00:18:14,400 --> 00:18:19,919

few different forms. You have the

486

00:18:17,679 --> 00:18:21,679

offsetting agenda for certain things,

487

00:18:19,919 --> 00:18:24,240

like the Woodland Carbon Code and the

488

00:18:21,679 --> 00:18:26,559

Peatland Code, which are designed to help

489

00:18:24,240 --> 00:18:28,960

get money into restoration projects. If i

490

00:18:26,559 --> 00:18:31,360

use the Peatland Code as an example,

491

00:18:28,960 --> 00:18:33,840

it costs an awful lot to restore a

492

00:18:31,360 --> 00:18:36,160

bog or peat environment, but that is

493

00:18:33,840 --> 00:18:38,240

obviously a major thing from a point

494

00:18:36,160 --> 00:18:41,120

view of carbon

495

00:18:38,240 --> 00:18:42,400

reductions. Peat is a massive reservoir

496

00:18:41,120 --> 00:18:45,760

of carbon.

497

00:18:42,400 --> 00:18:48,240

Both in existence, i.e., if there is a

498

00:18:45,760 --> 00:18:50,880

blanket bog or a peat environment,

499

00:18:48,240 --> 00:18:52,320

then that holds tonnes and tonnes of carbon.

500

00:18:50,880 --> 00:18:54,400

If we are

501

00:18:52,320 --> 00:18:57,039

affecting that land and digging it out

502

00:18:54,400 --> 00:18:59,280

to use as a compost,

503

00:18:57,039 --> 00:19:01,360

or if we're just draining it

504

00:18:59,280 --> 00:19:03,039

for agriculture use, then we start emitting

505

00:19:01,360 --> 00:19:05,120

carbon from that

506

00:19:03,039 --> 00:19:08,000

peat and it goes from being a sink to

507

00:19:05,120 --> 00:19:09,679

a source, and is obviously a major

508

00:19:08,000 --> 00:19:12,000

problem. We need to keep what carbon we

509

00:19:09,679 --> 00:19:14,160

have in the ground in the ground,

510

00:19:12,000 --> 00:19:16,160

but as I say, restoration of those

511

00:19:14,160 --> 00:19:19,280

systems and the maintenance of them as

512

00:19:16,160 --> 00:19:21,120

sinks is costly, and it's not a cheap

513

00:19:19,280 --> 00:19:24,880

thing to do. One of the ways you can

514

00:19:21,120 --> 00:19:27,520

facilitate this is to open that up to

515

00:19:24,880 --> 00:19:31,039

private money to come and invest in the

516

00:19:27,520 --> 00:19:32,559

restoration and have that as an offset.

517

00:19:31,039 --> 00:19:35,039

For something like the Peatland Carbon

518

00:19:32,559 --> 00:19:36,640

Code, because it obviously is

519

00:19:35,039 --> 00:19:39,679

regulated, because there are governing

520

00:19:36,640 --> 00:19:42,559

bodies (government level and otherwise)

521

00:19:39,679 --> 00:19:45,520

involved, and there are independent

522

00:19:42,559 --> 00:19:47,840

people assessing its quality, then

523

00:19:45,520 --> 00:19:51,120

there's a certain reassurance there

524

00:19:47,840 --> 00:19:53,440

that it's actually a genuine effect.

525

00:19:51,120 --> 00:19:54,480

Other factors or other offsetting

526

00:19:53,440 --> 00:19:56,960

agendas

527

00:19:54,480 --> 00:19:59,120

may be less so. A lot of these are

528

00:19:56,960 --> 00:20:00,640

from fossil fuel companies. It's very

529

00:19:59,120 --> 00:20:02,880

easy to find these. You can look for them

530

00:20:00,640 --> 00:20:05,440

online; it might be a gas company or

531

00:20:02,880 --> 00:20:08,000

otherwise, and it will have an offsetting

532

00:20:05,440 --> 00:20:10,480

scheme that you as a customer

533

00:20:08,000 --> 00:20:11,760

can buy into, and then they will invest

534

00:20:10,480 --> 00:20:13,919

in

535

00:20:11,760 --> 00:20:14,960

restoration projects or ecological

536

00:20:13,919 --> 00:20:16,559

projects

537

00:20:14,960 --> 00:20:18,480

around the world; it might be in the UK or

538

00:20:16,559 --> 00:20:20,080

somewhere in the developing

539

00:20:18,480 --> 00:20:22,320

world. It very much depends on the

540

00:20:20,080 --> 00:20:24,640

company. I guess they'll

541

00:20:22,320 --> 00:20:26,240

explain what their agenda is,

542

00:20:24,640 --> 00:20:28,480

but there is a problem with a lot of

543

00:20:26,240 --> 00:20:30,960

these because the intention is to keep

544

00:20:28,480 --> 00:20:34,480

using fossil fuels and to do something

545

00:20:30,960 --> 00:20:36,720

elsewhere to offset that fact. And that

546

00:20:34,480 --> 00:20:39,200

is a bit of a problem because

547

00:20:36,720 --> 00:20:41,520

there is no way we can offset greenhouse

548

00:20:39,200 --> 00:20:44,480

gas emissions at the rate we have them

549

00:20:41,520 --> 00:20:46,159

simply by trying to restore environments

550

00:20:44,480 --> 00:20:48,960

or planting more trees.

551

00:20:46,159 --> 00:20:51,360

You have to stop

552

00:20:48,960 --> 00:20:54,320

using fossil fuels and emitting

553

00:20:51,360 --> 00:20:56,640

greenhouse gases from fossil fuel usage,

554

00:20:54,320 --> 00:20:58,240

and simultaneously you need to be

555

00:20:56,640 --> 00:21:00,080

restoring environments and planting more

556

00:20:58,240 --> 00:21:01,360

trees to draw the

557

00:21:00,080 --> 00:21:03,919

greenhouse gases that are in the

558

00:21:01,360 --> 00:21:06,000

atmosphere out at the same time. It is

559

00:21:03,919 --> 00:21:07,919

impossible really to visualise a

560

00:21:06,000 --> 00:21:10,000

system where we can

561

00:21:07,919 --> 00:21:11,679

‘green-wash’ our way to a safe and

562

00:21:10,000 --> 00:21:12,960

secure future.

563

00:21:11,679 --> 00:21:14,400

I was going to pick up on that point

564

00:21:12,960 --> 00:21:16,480

that that is where the term ‘green-

565

00:21:14,400 --> 00:21:18,000

washing’ comes from, and that's where some

566

00:21:16,480 --> 00:21:19,200

of the controversies around carbon

567

00:21:18,000 --> 00:21:20,240

trading

568

00:21:19,200 --> 00:21:22,240

do lie.

569

00:21:20,240 --> 00:21:24,480

But for farmers and those listening to

570

00:21:22,240 --> 00:21:26,000

this podcast thinking

571

00:21:24,480 --> 00:21:27,679

are there any ways in which they could

572

00:21:26,000 --> 00:21:30,559

benefit financially or generate an

573

00:21:27,679 --> 00:21:32,559

income from carbon sequestration on

574

00:21:30,559 --> 00:21:34,159

their farms, clearly, future support

575

00:21:32,559 --> 00:21:36,080

schemes – The Sustainable Farming Scheme

576

00:21:34,159 --> 00:21:38,320

in Wales developed by the Welsh Government –

577

00:21:36,080 --> 00:21:40,080

will have a strong focus on some of

578

00:21:38,320 --> 00:21:42,720

the practices that will contribute

579

00:21:40,080 --> 00:21:44,559

towards the journey towards net-zero, but

580

00:21:42,720 --> 00:21:46,320

are there other ways in which income

581

00:21:44,559 --> 00:21:49,120

could be generated?

582

00:21:46,320 --> 00:21:51,440

I would say yes, indeed. The

583

00:21:49,120 --> 00:21:53,760

sister to the Peatland Carbon Code is

584

00:21:51,440 --> 00:21:55,280

the Woodland Carbon Code, and this is

585

00:21:53,760 --> 00:21:57,679

open and

586

00:21:55,280 --> 00:21:59,840

available to any land manager in the UK

587

00:21:57,679 --> 00:22:02,320

at this minute in time.

588

00:21:59,840 --> 00:22:04,559

It does require you to take for instance,

589

00:22:02,320 --> 00:22:06,559

land out of –

590

00:22:04,559 --> 00:22:08,240

I hesitate to say food production

591

00:22:06,559 --> 00:22:10,640

because it might not be for that –

592

00:22:08,240 --> 00:22:13,120

but equally, if you have a field and you

593

00:22:10,640 --> 00:22:15,679

want to re-establish tree cover, then it

594

00:22:13,120 --> 00:22:18,960

is possible to do so. There are

595

00:22:15,679 --> 00:22:21,760

systems within the Woodland Carbon Code,

596

00:22:18,960 --> 00:22:24,080

which again are more regulated

597

00:22:21,760 --> 00:22:26,320

than other systems available in

598

00:22:24,080 --> 00:22:29,200

the free marketplace, which would allow

599

00:22:26,320 --> 00:22:32,159

you to sell carbon credits or sell the

600

00:22:29,200 --> 00:22:35,679

potential of that carbon sequestration

601

00:22:32,159 --> 00:22:38,080

endeavour to parties that need to

602

00:22:35,679 --> 00:22:39,760

to purchase

603

00:22:38,080 --> 00:22:41,440

offset credits from elsewhere. Those

604

00:22:39,760 --> 00:22:44,480

industries might be the heavy

605

00:22:41,440 --> 00:22:46,799

polluters and desperate to try

606

00:22:44,480 --> 00:22:48,960

and offset some of their current

607

00:22:46,799 --> 00:22:50,640

pollution activities, and there are

608

00:22:48,960 --> 00:22:52,799

certain industries which are heavily

609

00:22:50,640 --> 00:22:54,480

polluting which can't stop being

610

00:22:52,799 --> 00:22:56,640

polluters at this minute in time, such as

611

00:22:54,480 --> 00:22:58,400

construction, cement

612

00:22:56,640 --> 00:22:59,520

production and things like that.

613

00:22:58,400 --> 00:23:02,159

614

00:22:59,520 --> 00:23:04,640

We do need to move away from how we

615

00:23:02,159 --> 00:23:06,240

manage with cement in this world,

616

00:23:04,640 --> 00:23:08,000

but to the best of my knowledge, there is

617

00:23:06,240 --> 00:23:10,240

no adequate way to do so at this minute

618

00:23:08,000 --> 00:23:11,679

in time.

619

00:23:10,240 --> 00:23:13,760

One of the mechanisms there is to

620

00:23:11,679 --> 00:23:17,200

try and obviously limit the impact of

621

00:23:13,760 --> 00:23:19,440

that by offsetting and introducing

622

00:23:17,200 --> 00:23:20,400

carbon sequestration elsewhere.

623

00:23:19,440 --> 00:23:22,799

624

00:23:20,400 --> 00:23:24,159

For the farmer though, it is entirely

625

00:23:22,799 --> 00:23:25,520

possible that you can do this and there

626

00:23:24,159 --> 00:23:28,080

are

627

00:23:25,520 --> 00:23:29,440

brokerages, for want of a better

628

00:23:28,080 --> 00:23:31,280

term, which are recommended through

629

00:23:29,440 --> 00:23:33,280

this programme, and that will put you in

630

00:23:31,280 --> 00:23:36,720

touch with companies that are actively

631

00:23:33,280 --> 00:23:38,880

seeking to fund such endeavours. If you're

632

00:23:36,720 --> 00:23:40,159

lucky enough to be in England – which most

633

00:23:38,880 --> 00:23:42,799

of our listeners won't be, but some of

634

00:23:40,159 --> 00:23:44,559

them are – there's

635

00:23:42,799 --> 00:23:47,039

the potential that you can also have

636

00:23:44,559 --> 00:23:49,039

this guarantee through

637

00:23:47,039 --> 00:23:51,440

the

638

00:23:49,039 --> 00:23:54,240

Woodland Carbon Guarantee Scheme where

639

00:23:51,440 --> 00:23:56,240

government will even set a price and buy

640

00:23:54,240 --> 00:23:58,000

it back from you at a certain point in

641

00:23:56,240 --> 00:24:00,000

time if you want to sell. There is

642

00:23:58,000 --> 00:24:02,559

kind of a safety net underneath. Sadly,

643

00:24:00,000 --> 00:24:05,039

that doesn't apply to us here in Wales,

644

00:24:02,559 --> 00:24:06,960

but even still, as demand

645

00:24:05,039 --> 00:24:09,200

for this sort of stuff continues to

646

00:24:06,960 --> 00:24:12,080

increase, perhaps the safety net becomes

647

00:24:09,200 --> 00:24:15,120

less of a major concern for landowners.

648

00:24:12,080 --> 00:24:17,440

649

00:24:15,120 --> 00:24:20,000

650

00:24:17,440 --> 00:24:22,159

Selling existing woodland

651

00:24:20,000 --> 00:24:24,400

isn't really going to work. You have to

652

00:24:22,159 --> 00:24:26,240

demonstrate that you're actually adding

653

00:24:24,400 --> 00:24:29,600

carbon sequestration to a system. It

654

00:24:26,240 --> 00:24:30,480

must be based on additionality, rather

655

00:24:29,600 --> 00:24:32,559

than

656

00:24:30,480 --> 00:24:34,960

just a process of what's going on

657

00:24:32,559 --> 00:24:37,120

already. If you're already growing

658

00:24:34,960 --> 00:24:39,120

grass, it would be very difficult to say

659

00:24:37,120 --> 00:24:40,880

“I'll start growing grass and there's a

660

00:24:39,120 --> 00:24:42,720

carbon offset there”. That doesn't

661

00:24:40,880 --> 00:24:45,120

work. You'll need to demonstrate that

662

00:24:42,720 --> 00:24:46,799

it is actually going to be something new,

663

00:24:45,120 --> 00:24:48,720

but in America, for instance,

664

00:24:46,799 --> 00:24:50,640

and one of the things I

665

00:24:48,720 --> 00:24:52,720

think we will see here increasingly in

666

00:24:50,640 --> 00:24:54,320

the future is they are paying people to

667

00:24:52,720 --> 00:24:56,799

reduce the intensity of their food

668

00:24:54,320 --> 00:24:58,880

production. For instance, we might see

669

00:24:56,799 --> 00:25:01,360

private organisations funding farmers in

670

00:24:58,880 --> 00:25:03,919

Wales to switch towards

671

00:25:01,360 --> 00:25:06,159

low-intensity livestock production, such

672

00:25:03,919 --> 00:25:08,559

as species-rich grassland

673

00:25:06,159 --> 00:25:10,640

with a few native breeds of cow, or

674

00:25:08,559 --> 00:25:11,840

something along those lines

675

00:25:10,640 --> 00:25:14,400

which

676

00:25:11,840 --> 00:25:16,960

would mean you're not perhaps producing quite

677

00:25:14,400 --> 00:25:18,480

as lucratively as a farmer as

678

00:25:16,960 --> 00:25:20,480

you might otherwise do,

679

00:25:18,480 --> 00:25:22,400

but if you’re having that endeavour

680

00:25:20,480 --> 00:25:24,799

offset slightly by people investing in

681

00:25:22,400 --> 00:25:27,440

from the outside, and as you get the

682

00:25:24,799 --> 00:25:28,960

benefits of carbon storage (and not just

683

00:25:27,440 --> 00:25:30,559

carbon storage, but all the ecosystem

684

00:25:28,960 --> 00:25:32,400

services that you will derive from that,

685

00:25:30,559 --> 00:25:35,360

such as biodiversity, flood

686

00:25:32,400 --> 00:25:38,080

mitigation, etc.), then perhaps there is

687

00:25:35,360 --> 00:25:40,640

a better system all-round which the farmer

688

00:25:38,080 --> 00:25:42,559

can benefit from as a custodian of the

689

00:25:40,640 --> 00:25:45,039

landscape.

690

00:25:42,559 --> 00:25:47,600

Are there any risks to farmers if

691

00:25:45,039 --> 00:25:49,679

they decide to sell any credits they

692

00:25:47,600 --> 00:25:51,520

generate from various actions on

693

00:25:49,679 --> 00:25:52,559

the land, whether that's tree planting or

694

00:25:51,520 --> 00:25:54,880

otherwise?

695

00:25:52,559 --> 00:25:56,559

Agriculture has its own targets of

696

00:25:54,880 --> 00:25:58,559

reaching net-zero, and

697

00:25:56,559 --> 00:26:01,039

the farming business might actually

698

00:25:58,559 --> 00:26:03,679

need those credits for itself to

699

00:26:01,039 --> 00:26:06,559

demonstrate a net-zero position.

700

00:26:03,679 --> 00:26:08,320

That is a really good point.

701

00:26:06,559 --> 00:26:09,600

Personally, I think this is something

702

00:26:08,320 --> 00:26:10,960

that we haven't really

703

00:26:09,600 --> 00:26:13,279

considered from the point of view of

704

00:26:10,960 --> 00:26:16,320

agriculture, because let's face it,

705

00:26:13,279 --> 00:26:19,200

agriculture is not net-zero itself; we

706

00:26:16,320 --> 00:26:20,799

are a polluter.

707

00:26:19,200 --> 00:26:22,960

There are many arguments to rage back and

708

00:26:20,799 --> 00:26:25,520

forth about how much of a polluter

709

00:26:22,960 --> 00:26:28,159

agriculture is, and

710

00:26:25,520 --> 00:26:30,480

we'll leave those aside for today, but

711

00:26:28,159 --> 00:26:34,320

from the point of view of changing a

712

00:26:30,480 --> 00:26:37,520

landscape to make yourself

713

00:26:34,320 --> 00:26:40,880

more of a net-sequesterer, rather than

714

00:26:37,520 --> 00:26:41,679

polluter, if those are adequate words to use,

715

00:26:40,880 --> 00:26:42,480

716

00:26:41,679 --> 00:26:43,919

717

00:26:42,480 --> 00:26:46,480

then here is a danger that if you've

718

00:26:43,919 --> 00:26:48,720

given away all of your opportunity for

719

00:26:46,480 --> 00:26:50,400

sequestering carbon, your carbon

720

00:26:48,720 --> 00:26:52,799

credit opportunity,

721

00:26:50,400 --> 00:26:55,120

then perhaps for yourself there will be

722

00:26:52,799 --> 00:26:57,279

a cost in the future. If we start looking

723

00:26:55,120 --> 00:27:00,799

at all industries and

724

00:26:57,279 --> 00:27:03,679

establishing exactly how much

725

00:27:00,799 --> 00:27:06,159

gas is produced in every sector of

726

00:27:03,679 --> 00:27:08,720

society and levying attacks

727

00:27:06,159 --> 00:27:11,600

accordingly, that is not impossible.

728

00:27:08,720 --> 00:27:13,840

We are getting further down the road of

729

00:27:11,600 --> 00:27:15,600

understanding everyone's contribution to

730

00:27:13,840 --> 00:27:17,360

climate change, be that private people

731

00:27:15,600 --> 00:27:20,000

who fly more than five to ten times a

732

00:27:17,360 --> 00:27:22,159

year, or industries which are

733

00:27:20,000 --> 00:27:24,080

734

00:27:22,159 --> 00:27:26,320

heavy polluters as such.

735

00:27:24,080 --> 00:27:28,559

Increasingly, this recognition that there

736

00:27:26,320 --> 00:27:30,880

is consequence for all sectors of

737

00:27:28,559 --> 00:27:33,279

society is starting to play a part, and

738

00:27:30,880 --> 00:27:35,919

that will apply to farmers.

739

00:27:33,279 --> 00:27:38,000

Also and additionally to that,

740

00:27:35,919 --> 00:27:40,720

half the issue at this minute in time is

741

00:27:38,000 --> 00:27:41,919

it is very much an unknown environment.

742

00:27:40,720 --> 00:27:44,399

743

00:27:41,919 --> 00:27:45,919

Consequence to the farmer is reasonably

744

00:27:44,399 --> 00:27:48,320

unknown. We don't know what the

745

00:27:45,919 --> 00:27:50,720

consequence will be if you were to

746

00:27:48,320 --> 00:27:52,640

allow a company to buy your carbon

747

00:27:50,720 --> 00:27:55,279

credits at this minute in time,

748

00:27:52,640 --> 00:27:56,640

whether that company goes bust or

749

00:27:55,279 --> 00:27:58,320

whether

750

00:27:56,640 --> 00:28:00,480

their

751

00:27:58,320 --> 00:28:02,399

intentions are not necessarily pure and all

752

00:28:00,480 --> 00:28:04,480

these other many myriad pitfalls that

753

00:28:02,399 --> 00:28:06,880

may exist or may not, but the simple

754

00:28:04,480 --> 00:28:08,000

reality is we don't know.

755

00:28:06,880 --> 00:28:10,159

I think there will be some steep

756

00:28:08,000 --> 00:28:13,200

learning curves over the next few years

757

00:28:10,159 --> 00:28:14,960

about what role this whole

758

00:28:13,200 --> 00:28:16,640

system could play in supporting

759

00:28:14,960 --> 00:28:18,559

agriculture.

760

00:28:16,640 --> 00:28:20,799

It’s interesting to look at the

761

00:28:18,559 --> 00:28:22,880

potential scenarios that might play out

762

00:28:20,799 --> 00:28:24,559

if a farmer or landowner decides to sell

763

00:28:22,880 --> 00:28:27,039

some credits on the back of tree

764

00:28:24,559 --> 00:28:29,760

planting. There are inevitably going to

765

00:28:27,039 --> 00:28:31,279

be some ongoing obligations to manage

766

00:28:29,760 --> 00:28:33,120

that woodland in a proper way to make

767

00:28:31,279 --> 00:28:35,279

sure it does sequester the carbon it's

768

00:28:33,120 --> 00:28:37,200

set out to do. What happens if

769

00:28:35,279 --> 00:28:38,880

there's a woodland fire? What happens if

770

00:28:37,200 --> 00:28:39,840

there's some disaster? What happens if

771

00:28:38,880 --> 00:28:42,240

weather

772

00:28:39,840 --> 00:28:44,480

and all sorts of natural disasters might

773

00:28:42,240 --> 00:28:45,840

impact that in any way? Possibly,

774

00:28:44,480 --> 00:28:47,760

there might be need for some sort of

775

00:28:45,840 --> 00:28:49,760

insurance cover.

776

00:28:47,760 --> 00:28:51,679

To make the decision to sell some

777

00:28:49,760 --> 00:28:53,679

credits, I guess people have to be aware

778

00:28:51,679 --> 00:28:55,120

of the ongoing obligations that might go

779

00:28:53,679 --> 00:28:57,520

alongside that.

780

00:28:55,120 --> 00:28:59,520

I think that's a very realistic problem

781

00:28:57,520 --> 00:29:00,480

and potential, absolutely.

782

00:28:59,520 --> 00:29:02,720

783

00:29:00,480 --> 00:29:05,360

Have we ever even discussed the concept

784

00:29:02,720 --> 00:29:07,440

of insuring your landscape or your

785

00:29:05,360 --> 00:29:10,559

woodland against future environmental

786

00:29:07,440 --> 00:29:12,399

perturbations, such as fires, which in

787

00:29:10,559 --> 00:29:15,520

the context of environmental change

788

00:29:12,399 --> 00:29:17,120

become more likely as well?

789

00:29:15,520 --> 00:29:19,200

There's kind of

790

00:29:17,120 --> 00:29:22,000

a vicious circle or vicious cycle

791

00:29:19,200 --> 00:29:23,919

involved in that system as well.

792

00:29:22,000 --> 00:29:25,919

In terms of the pitfalls for

793

00:29:23,919 --> 00:29:29,039

the farmer, there are going to be

794

00:29:25,919 --> 00:29:31,600

many hidden little challenges along

795

00:29:29,039 --> 00:29:33,520

this journey, which we can't

796

00:29:31,600 --> 00:29:35,760

even foresee at the moment,

797

00:29:33,520 --> 00:29:37,919

but I suspect there will be some

798

00:29:35,760 --> 00:29:39,840

interesting stories that come out

799

00:29:37,919 --> 00:29:42,320

the agricultural sector in years to

800

00:29:39,840 --> 00:29:44,320

come, to cautionary tales,

801

00:29:42,320 --> 00:29:45,440

should we say for the challenges

802

00:29:44,320 --> 00:29:47,120

they've had.

803

00:29:45,440 --> 00:29:49,120

The only thing I would ever recommend at

804

00:29:47,120 --> 00:29:51,279

this minute in time to somebody is

805

00:29:49,120 --> 00:29:52,880

go with something with regulation.

806

00:29:51,279 --> 00:29:54,480

807

00:29:52,880 --> 00:29:56,640

The Woodland Carbon Code, the

808

00:29:54,480 --> 00:29:59,120

Peatland Code, anything that

809

00:29:56,640 --> 00:30:01,600

has a degree of regulation, is going to

810

00:29:59,120 --> 00:30:03,120

be slightly more robust. The private

811

00:30:01,600 --> 00:30:04,399

companies whilst they might be entirely

812

00:30:03,120 --> 00:30:06,240

genuine,

813

00:30:04,399 --> 00:30:08,399

814

00:30:06,240 --> 00:30:10,080

without the regulation effect at

815

00:30:08,399 --> 00:30:12,320

government level,

816

00:30:10,080 --> 00:30:14,559

there's that slight degree of

817

00:30:12,320 --> 00:30:16,320

insecurity.

818

00:30:14,559 --> 00:30:18,159

Do you expect there's going to be more

819

00:30:16,320 --> 00:30:20,320

private companies making direct

820

00:30:18,159 --> 00:30:22,159

approaches to landowners and trying to get

821

00:30:20,320 --> 00:30:23,840

them signed up in some sort of

822

00:30:22,159 --> 00:30:25,279

offsetting arrangement, offsetting

823

00:30:23,840 --> 00:30:27,360

agreements?

824

00:30:25,279 --> 00:30:29,440

This isn't very much a new territory

825

00:30:27,360 --> 00:30:30,559

for all involved, but is this something

826

00:30:29,440 --> 00:30:32,240

farmers

827

00:30:30,559 --> 00:30:33,840

might need to prepare themselves for?

828

00:30:32,240 --> 00:30:35,600

They are from time to time

829

00:30:33,840 --> 00:30:37,279

approached by solar companies or wind

830

00:30:35,600 --> 00:30:39,360

companies wanting to develop on the land,

831

00:30:37,279 --> 00:30:41,440

could we suddenly see offsetting

832

00:30:39,360 --> 00:30:42,720

approaches feature in

833

00:30:41,440 --> 00:30:45,600

discussions?

834

00:30:42,720 --> 00:30:46,399

100%.

835

00:30:45,600 --> 00:30:48,799

836

00:30:46,399 --> 00:30:51,600

The minute certain companies will

837

00:30:48,799 --> 00:30:54,240

want to act as direct brokerages,

838

00:30:51,600 --> 00:30:56,720

then of course those companies will

839

00:30:54,240 --> 00:30:58,399

quickly run out of enthusiastic

840

00:30:56,720 --> 00:31:00,720

individuals that are coming to them, and

841

00:30:58,399 --> 00:31:03,360

then they will go and start looking

842

00:31:00,720 --> 00:31:05,519

for sites of interest. To

843

00:31:03,360 --> 00:31:08,240

think you might actually have cold-

844

00:31:05,519 --> 00:31:10,000

callers phoning you to try and

845

00:31:08,240 --> 00:31:11,919

purchase your carbon stock or something

846

00:31:10,000 --> 00:31:13,679

along those lines, I don't think that's

847

00:31:11,919 --> 00:31:14,720

unrealistic in the slightest. I think

848

00:31:13,679 --> 00:31:16,399

that's

849

00:31:14,720 --> 00:31:18,320

quite possible.

850

00:31:16,399 --> 00:31:20,080

We are already seeing something slightly

851

00:31:18,320 --> 00:31:22,960

different to that, which is a much more

852

00:31:20,080 --> 00:31:24,880

direct effect, and I suppose the direct

853

00:31:22,960 --> 00:31:26,799

effect is more logical because the kind

854

00:31:24,880 --> 00:31:28,799

of people we're talking about being in

855

00:31:26,799 --> 00:31:33,279

the background here are

856

00:31:28,799 --> 00:31:36,159

very financially motivated, large-

857

00:31:33,279 --> 00:31:37,360

asset-pot groups of people,

858

00:31:36,159 --> 00:31:39,039

and they're not even going to the farmer,

859

00:31:37,360 --> 00:31:41,519

they're just buying up the land.

860

00:31:39,039 --> 00:31:43,919

We are seeing that a little bit in Wales.

861

00:31:41,519 --> 00:31:45,440

I've spoken to certain groups

862

00:31:43,919 --> 00:31:47,120

around the country that are concerned

863

00:31:45,440 --> 00:31:49,840

with things that are happening in their

864

00:31:47,120 --> 00:31:53,039

local area, whereby farmsteads are just

865

00:31:49,840 --> 00:31:54,480

purchased by either a UK and also an

866

00:31:53,039 --> 00:31:56,480

offshore company

867

00:31:54,480 --> 00:31:58,559

with the sole intention of planting

868

00:31:56,480 --> 00:32:00,080

trees on what was agricultural land

869

00:31:58,559 --> 00:32:02,240

before.

870

00:32:00,080 --> 00:32:05,760

It is a tricky one because we do need to

871

00:32:02,240 --> 00:32:07,840

increase tree cover in Wales by

872

00:32:05,760 --> 00:32:10,320

a rather substantial amount.

873

00:32:07,840 --> 00:32:12,640

We're sort of moving over tens of

874

00:32:10,320 --> 00:32:13,760

thousands of hectares every year into

875

00:32:12,640 --> 00:32:16,000

forestry

876

00:32:13,760 --> 00:32:19,279

as part of our intention for changing

877

00:32:16,000 --> 00:32:21,360

the landscape moving forwards.

878

00:32:19,279 --> 00:32:22,720

It kind of ties in with what the government

879

00:32:21,360 --> 00:32:24,320

wants to do,

880

00:32:22,720 --> 00:32:26,960

but there are problems with that;

881

00:32:24,320 --> 00:32:28,880

problems for society, the community

882

00:32:26,960 --> 00:32:30,960

and things like this for

883

00:32:28,880 --> 00:32:33,919

Welsh language for instance, which is a

884

00:32:30,960 --> 00:32:37,600

large part of rural society. If land

885

00:32:33,919 --> 00:32:39,679

starts getting bought up on mass by

886

00:32:37,600 --> 00:32:40,880

organisations which are from outside of

887

00:32:39,679 --> 00:32:42,320

Wales,

888

00:32:40,880 --> 00:32:44,000

that may well have an effect on our

889

00:32:42,320 --> 00:32:45,679

local communities. It's not

890

00:32:44,000 --> 00:32:47,679

necessarily clear at the moment, but

891

00:32:45,679 --> 00:32:48,960

certainly, I think there is going to be a

892

00:32:47,679 --> 00:32:50,000

competition

893

00:32:48,960 --> 00:32:52,399

for

894

00:32:50,000 --> 00:32:54,320

the potential for sequestering carbon

895

00:32:52,399 --> 00:32:56,480

using land management, and

896

00:32:54,320 --> 00:32:58,399

the implications of that are only

897

00:32:56,480 --> 00:33:00,320

starting to become clear.

898

00:32:58,399 --> 00:33:02,720

I'm sure there are a lot of people

899

00:33:00,320 --> 00:33:04,399

within Welsh Government trying to work

900

00:33:02,720 --> 00:33:06,559

out how does this

901

00:33:04,399 --> 00:33:08,880

interplay with the new Sustainable

902

00:33:06,559 --> 00:33:10,320

Farming Scheme, and picking up on the

903

00:33:08,880 --> 00:33:11,840

very valid point you made earlier about

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00:33:10,320 --> 00:33:14,320

additionality. That is going to be something

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00:33:11,840 --> 00:33:16,159

that's going to be key to this,

906

00:33:14,320 --> 00:33:18,480

whether there's publicly funded

907

00:33:16,159 --> 00:33:20,559

schemes versus private money coming

908

00:33:18,480 --> 00:33:21,760

essentially to do the same thing.

909

00:33:20,559 --> 00:33:24,559

Yes, indeed.

910

00:33:21,760 --> 00:33:26,720

It's not particularly clear

911

00:33:24,559 --> 00:33:28,720

how these things will play out and what

912

00:33:26,720 --> 00:33:30,880

rules will be put in place.

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00:33:28,720 --> 00:33:33,039

You hope that there

914

00:33:30,880 --> 00:33:36,559

will be an intervention at some point in

915

00:33:33,039 --> 00:33:38,880

some degree of regulation, but then again

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00:33:36,559 --> 00:33:41,519

there is no way to know how that

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00:33:38,880 --> 00:33:43,840

could even work, because in principle,

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00:33:41,519 --> 00:33:45,519

these things are assets; they're

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00:33:43,840 --> 00:33:47,679

assets that belong to the farmer, and

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00:33:45,519 --> 00:33:49,279

it's kind of up to the farmer to choose

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00:33:47,679 --> 00:33:51,760

what he wants to do with that asset or

922

00:33:49,279 --> 00:33:54,000

how he wants to manage that landscape.

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00:33:51,760 --> 00:33:54,960

We can only hope that government will

924

00:33:54,000 --> 00:33:56,799

try and

925

00:33:54,960 --> 00:33:58,640

influence what land management looks

926

00:33:56,799 --> 00:34:01,440

like by shifting subsidy in that

927

00:33:58,640 --> 00:34:03,279

direction, and perhaps where subsidies are

928

00:34:01,440 --> 00:34:05,200

lacking for certain

929

00:34:03,279 --> 00:34:07,600

components, i.e.,

930

00:34:05,200 --> 00:34:09,119

to subsidise reducing red meat

931

00:34:07,600 --> 00:34:11,040

production by shifting towards more

932

00:34:09,119 --> 00:34:12,800

holistic

933

00:34:11,040 --> 00:34:15,679

production methods,

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00:34:12,800 --> 00:34:17,280

then perhaps private money can

935

00:34:15,679 --> 00:34:19,359

fill that gap a little bit to ensure

936

00:34:17,280 --> 00:34:21,520

that the farmer doesn't lose out, but the

937

00:34:19,359 --> 00:34:23,119

land gets managed in a way that we can

938

00:34:21,520 --> 00:34:24,639

all benefit from.

939

00:34:23,119 --> 00:34:26,480

But of course, food has got to come from

940

00:34:24,639 --> 00:34:28,240

somewhere, too, and we mustn't lose sight

941

00:34:26,480 --> 00:34:30,879

of the fact that

942

00:34:28,240 --> 00:34:32,879

we still need to be a food-producing

943

00:34:30,879 --> 00:34:34,800

nation, and that may become

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00:34:32,879 --> 00:34:36,720

even more apparent as

945

00:34:34,800 --> 00:34:39,200

areas of the world where we currently

946

00:34:36,720 --> 00:34:40,720

buy food from may struggle to produce it

947

00:34:39,200 --> 00:34:43,280

in the years to come under the

948

00:34:40,720 --> 00:34:45,919

context of climate change.

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00:34:43,280 --> 00:34:47,440

In summary, Will, for our listeners,

950

00:34:45,919 --> 00:34:49,440

many of which will be farmers and

951

00:34:47,440 --> 00:34:51,760

landowners, and they're all keeping a

952

00:34:49,440 --> 00:34:53,839

watching brief on carbon trading and trying

953

00:34:51,760 --> 00:34:56,079

to map out what this potentially might

954

00:34:53,839 --> 00:34:58,880

mean for them in terms of realising any

955

00:34:56,079 --> 00:35:01,599

value it might have or understanding the

956

00:34:58,880 --> 00:35:04,240

potential pitfalls it might present.

957

00:35:01,599 --> 00:35:06,960

what's your concluding remarks and

958

00:35:04,240 --> 00:35:09,200

summary points for them?

959

00:35:06,960 --> 00:35:12,400

I think one way or the other, our

960

00:35:09,200 --> 00:35:15,119

landscape is going to have to change.

961

00:35:12,400 --> 00:35:18,800

The land that we know in Wales at

962

00:35:15,119 --> 00:35:20,480

this minute in time is going to become

963

00:35:18,800 --> 00:35:21,839

much more covered in trees.

964

00:35:20,480 --> 00:35:23,680

965

00:35:21,839 --> 00:35:27,280

The committee on climate

966

00:35:23,680 --> 00:35:29,520

change who advise all UK governments

967

00:35:27,280 --> 00:35:32,000

of how we need to change to get towards

968

00:35:29,520 --> 00:35:34,400

net-zero has estimated that around about 22%

969

00:35:32,000 --> 00:35:36,480

of land needs to be released

970

00:35:34,400 --> 00:35:39,119

from traditional agricultural production

971

00:35:36,480 --> 00:35:41,520

for the purposes of carbon storage.

972

00:35:39,119 --> 00:35:43,440

With that in mind, we can see that

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00:35:41,520 --> 00:35:45,440

there is going to be an evolution of

974

00:35:43,440 --> 00:35:48,560

what land management looks like in the

975

00:35:45,440 --> 00:35:50,800

UK, and that will be both fed by

976

00:35:48,560 --> 00:35:53,040

government initiative, i.e., subsidies will

977

00:35:50,800 --> 00:35:55,680

change,

978

00:35:53,040 --> 00:35:58,079

laws or regulation will change and they

979

00:35:55,680 --> 00:36:00,240

will force farmers

980

00:35:58,079 --> 00:36:03,839

to make certain actions, and there will

981

00:36:00,240 --> 00:36:06,000

also be alternative incentives, i.e.,

982

00:36:03,839 --> 00:36:10,240

private industries or private

983

00:36:06,000 --> 00:36:13,359

investment which incentivises farmers

984

00:36:10,240 --> 00:36:15,920

by obviously valuing an action which

985

00:36:13,359 --> 00:36:19,119

sequesters carbon. What I would

986

00:36:15,920 --> 00:36:21,440

say at this minute in time to any farmer

987

00:36:19,119 --> 00:36:23,839

and any land manager is tread

988

00:36:21,440 --> 00:36:26,000

carefully, which is not a very

989

00:36:23,839 --> 00:36:27,520

helpful piece of advice, but the

990

00:36:26,000 --> 00:36:29,760

reality is, there's

991

00:36:27,520 --> 00:36:32,880

not a lot of evidence to say that it

992

00:36:29,760 --> 00:36:35,760

will be this or it will be that. There is

993

00:36:32,880 --> 00:36:38,079

a great potential that some of these

994

00:36:35,760 --> 00:36:40,160

schemes or some of this investment might

995

00:36:38,079 --> 00:36:42,000

not be wholly decent or might not be

996

00:36:40,160 --> 00:36:43,920

beneficial for the farmer,

997

00:36:42,000 --> 00:36:45,440

and unfortunately, the only way we will

998

00:36:43,920 --> 00:36:47,200

know with a lot of these things will be

999

00:36:45,440 --> 00:36:48,720

hindsight.

1000

00:36:47,200 --> 00:36:50,160

If in doubt,

1001

00:36:48,720 --> 00:36:52,160

stick to

1002

00:36:50,160 --> 00:36:54,320

systems which are regulated. We've

1003

00:36:52,160 --> 00:36:56,960

mentioned the Woodland Carbon Code

1004

00:36:54,320 --> 00:36:59,200

already, we've talked about subsidy and

1005

00:36:56,960 --> 00:37:01,200

direction from government, and I would

1006

00:36:59,200 --> 00:37:04,240

very much suggest that that is the

1007

00:37:01,200 --> 00:37:06,720

framework you aim for.

1008

00:37:04,240 --> 00:37:08,720

If in doubt, seek out a source of

1009

00:37:06,720 --> 00:37:11,119

information that's trusted.

1010

00:37:08,720 --> 00:37:13,119

There are organisations like Farming Connect that you

1011

00:37:11,119 --> 00:37:15,760

can approach at any point in time and

1012

00:37:13,119 --> 00:37:18,079

they will help by trying to translate

1013

00:37:15,760 --> 00:37:20,400

information, to look at the evidence

1014

00:37:18,079 --> 00:37:23,119

for you or to speak to government, but

1015

00:37:20,400 --> 00:37:25,760

they will be there to support the farmer

1016

00:37:23,119 --> 00:37:28,720

and act as a translation service, which

1017

00:37:25,760 --> 00:37:30,880

is obviously what it is meant to be.

1018

00:37:28,720 --> 00:37:33,760

But draw upon all of the sources of

1019

00:37:30,880 --> 00:37:36,400

information you have and try and get as

1020

00:37:33,760 --> 00:37:39,119

good a picture as you can. I would

1021

00:37:36,400 --> 00:37:41,280

suggest overall whilst the

1022

00:37:39,119 --> 00:37:43,200

times are particularly challenging, there

1023

00:37:41,280 --> 00:37:45,359

are some interesting days ahead for the

1024

00:37:43,200 --> 00:37:48,000

agricultural and farming community,

1025

00:37:45,359 --> 00:37:49,839

and maybe some opportunities to be

1026

00:37:48,000 --> 00:37:52,480

recognised for all of the efforts that

1027

00:37:49,839 --> 00:37:55,200

go in and not just food and fibre

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00:37:52,480 --> 00:37:57,040

production, but as custodians of

1029

00:37:55,200 --> 00:37:58,880

ecosystems,

1030

00:37:57,040 --> 00:38:01,200

though we may have to change how we do

1031

00:37:58,880 --> 00:38:03,520

some of our existing management to make

1032

00:38:01,200 --> 00:38:04,800

sure that we get the full benefit of

1033

00:38:03,520 --> 00:38:07,440

that.

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00:38:04,800 --> 00:38:08,480

Dr Will Styles, thank you ever so

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00:38:07,440 --> 00:38:10,320

much for

1036

00:38:08,480 --> 00:38:12,880

taking us through what can be quite a

1037

00:38:10,320 --> 00:38:14,320

complicated and difficult to understand

1038

00:38:12,880 --> 00:38:16,480

topic, and you've managed to present the

1039

00:38:14,320 --> 00:38:18,320

facts in such a very easy to

1040

00:38:16,480 --> 00:38:19,920

understand manner and also present some

1041

00:38:18,320 --> 00:38:22,240

of the challenges that are

1042

00:38:19,920 --> 00:38:23,680

going to be put in front of

1043

00:38:22,240 --> 00:38:24,800

farmers and landowners going

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00:38:23,680 --> 00:38:26,720

forward.

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00:38:24,800 --> 00:38:28,640

I think your message there, ‘proceed with

1046

00:38:26,720 --> 00:38:31,040

caution’, is a sound one and take

1047

00:38:28,640 --> 00:38:32,400

advantage of the advice

1048

00:38:31,040 --> 00:38:34,800

and support available through

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00:38:32,400 --> 00:38:37,520

initiatives and programmes such as Farming

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00:38:34,800 --> 00:38:39,440

Connect. Dr Will Styles, thank you ever

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00:38:37,520 --> 00:38:41,680

so much for your time on this podcast,

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00:38:39,440 --> 00:38:44,480

and I'm sure we will be picking your

1053

00:38:41,680 --> 00:38:46,400

brains at a future point on how all this

1054

00:38:44,480 --> 00:38:48,320

develops, because it's still very much in

1055

00:38:46,400 --> 00:38:50,240

its infancy, but for today and for this

1056

00:38:48,320 --> 00:38:52,880

episode, thank you very much.

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00:38:50,240 --> 00:38:52,880

Thank you, Aled.

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00:38:53,680 --> 00:38:57,280

If you would like more information about

1059

00:38:55,440 --> 00:38:59,760

the support available through Farming

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00:38:57,280 --> 00:39:01,520

Connect, please contact your local

1061

00:38:59,760 --> 00:39:04,640

development officer or the Service

1062

00:39:01,520 --> 00:39:07,119

Centre on 08456 000813.

1063

00:39:04,640 --> 00:39:08,880

1064

00:39:07,119 --> 00:39:11,520

And there we are. We've reached the end

1065

00:39:08,880 --> 00:39:13,520

of yet another episode. We'll be back in

1066

00:39:11,520 --> 00:39:15,760

two weeks’ time, with plenty more to talk

1067

00:39:13,520 --> 00:39:17,920

about, but in the meantime, don't forget

1068

00:39:15,760 --> 00:39:20,320

to hit subscribe on whichever platform

1069

00:39:17,920 --> 00:39:22,800

you use to keep notified of all new

1070

00:39:20,320 --> 00:39:24,560

episodes of Ear to the Ground.

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00:39:22,800 --> 00:39:26,800

On behalf of the team at Farming

1072

00:39:24,560 --> 00:39:28,480

Connect and myself, Aled Jones, thank you

1073

00:39:26,800 --> 00:39:31,130

for listening and goodbye for now.

1074

00:39:28,480 --> 00:39:32,490

1075

00:39:31,130 --> 00:39:44,470

[Applause]

1076

00:39:32,490 --> 00:39:44,470

[Music]

1077

00:39:49,119 --> 00:39:51,200