

1 former member of the European Parliament. Most  
2 recently it was acknowledged a very active member of  
3 the campaign for the "yes" vote and we too just want to  
4 congratulate you on that.

15:13

5  
6 A visionary I think in appointing Owen Lewis as CEO of  
7 Sustainable Energy Ireland, that was a very good move  
8 for the sustainable energy industry. I know that  
9 Brendan in the Renewable Energy Development Group that  
10 we sit on together has had very, very powerful forward  
11 looking views. To give his paper "Empowering Ireland's  
12 Energy Exports" Brendan Halligan, Chairman of  
13 Sustainable Energy Ireland.

15:14

15:23

14  
15  
16 **PRESENTATION DELIVERED BY BRENDAN HALLIGAN, AS FOLLOWS:**

17  
18 **BRENDAN HALLIGAN:** Mr. Chairman, Minister,  
19 Commissioner, ladies and  
20 gentlemen, first of all I want to thank and  
21 congratulate Brian on the initiative in setting up this  
22 organisation, it has been a very welcome development,  
23 and a particularly important arrival on the Irish  
24 policy scene. I think its success is already  
25 indicative of this conference here this morning. I  
26 want, secondly, to thank and commend the Scottish and  
27 Southern and Airtricity for supporting and sponsoring  
28 this conference, it is typical of their commitment to  
29 the economy and their responsible corporate

15:25

15:27

1 citizenship. It is good to be back, as Eamon Ryan  
2 said, at the day job after the last few months and it  
3 is particularly wonderful to share the platform with  
4 him, a man for whom I have the highest admiration and  
5 with whom I am delighted to work in this particularly 15:31  
6 important area. He is an inspiration, one of the best  
7 politicians we have been lucky to have and particularly  
8 fortunate in that he comes at exactly the right time.  
9 I am happy as well, of course, to work with my good  
10 friend Padraig McManus from the ESB. If the ESB aren't 15:33  
11 with you in this country you can forget about it. On  
12 this occasion they are very much part of the new scene,  
13 the renewal of the Irish economy and it is great to be  
14 with him on the platform.

15  
16 In a sense that is where I want to start, it is just 50  
17 years ago that I went into the lecture halls in UCD, I  
18 was slightly older than most of the other students  
19 because I had to put the money together myself and work  
20 for it first, in those days this was no free education 15:36  
21 at third level. I went into a funny place, a country  
22 which had been stagnating, whose future was in  
23 question. A book had been published by father John  
24 Ryan, the sociologist, in Fordham entitled "The  
25 Vanishing Irish", our population was falling 15:39  
26 constantly, our economy was utterly stagnant and yet I  
27 walked into a place that was vibrant, excitement was in  
28 the air and it was all because of the initiative taken  
29 by one man, Ken Whitaker, he is still alive, who had

1 put forward a vision, and not only a vision but a plan.  
2 50 years later here we are again. The point I want to  
3 make is that the plan that Whitaker put forward, the  
4 vision that he had, but the plan in particular, has run  
5 its course and it is finished, it is over and we have 15:42  
6 to replace it with something and if we don't we are in  
7 deep trouble.

8  
9 That is what I want to talk to you about this morning.  
10 I want to talk to you from the point of view of policy 15:42  
11 entrepreneurship, as it were. I want to insist that  
12 the views that I have now that I put forward are my  
13 own, despite the fact I am put down as Chairing SAI,  
14 which is true, but I also Chair the Institute of  
15 European Affairs, and it is not their views either; I 15:44  
16 am a member of the Labour Party and it is not Labour  
17 Party views; I am also a member of the St. Jude's GAA  
18 Club and as far as I know they don't have views on this  
19 matter either.

20 Here is what I am going to try and do, I am going to 15:45  
21 talk about the economics, the politics, the policy and  
22 then come on to the plan. In terms of the economics  
23 economics is a hard science, it is also a dismal one  
24 but it can be a hard science which in a sense you start  
25 with facts. I think it is very important that we 15:47  
26 accept who, where and what we are. That is a very  
27 difficult thing to do, and I will come back to that in  
28 a second. Comparative advantage has been mentioned by  
29 the three previous speakers and I am going to be very

1 much focusing on comparative advantage. Accepting the  
2 inevitable, a difficult one. Letting the imagination  
3 loose, and then plan accordingly.  
4

5 who are we? whitaker is astonishing, if you like, a 15:48  
6 statement of the obvious was that we were a small, open  
7 economy, but nobody thought on those terms at that  
8 particular time. It was only in the following seven or  
9 eight years that economists began to develop their  
10 thoughts round a small, open economy. what is it? 15:49

11 Essentially you have to export to survive and thrive.  
12 By exploiting your comparative advantage, if you can  
13 find out what it is, in growth sectors there is no  
14 point in doing it else where, and this is a fairly well  
15 known formula, but as is often the case with the 15:50  
16 obvious it is only when it is stated that it becomes  
17 obvious. Being small and open means that you must  
18 export, you must export and if you export you have to  
19 be competitive. Being competitive means that it must  
20 be based on your comparative advantage and you must be 15:51  
21 in growth sectors.  
22

23 The second point is: what are we at the moment? My  
24 starting point is, as of now we are a failed economy.  
25 With the unemployment growing at round half a million 15:53  
26 and the emigration valve shut off at least temporarily  
27 this is very serious. we have a failed banking system,  
28 a public finances crisis of enormous dimensions, bigger  
29 than the 1980s, bigger than the 1970s, with which we

1 had to grapple when we were in Government, we are  
2 borrowing 25 billion a year, 25 billion next year, 25  
3 billion the year after and God knows how long that is  
4 going to go on for. We are totally reliant on the  
5 European Central Bank and on the German banks, the 15:55  
6 commercial banks to keep us a float. These are  
7 realities, but at the same time the positive is that we  
8 have a very strong political and social infrastructure  
9 and of course we have high caliber human capital.  
10 These are the positives. 15:56

11  
12 Just to say a point about comparative advantage because  
13 it is very much at the centre of everything everybody  
14 has been talking about. As we know it comes from the  
15 economics of David Ricardo, that great English 15:56  
16 economist at the beginning of the 19th century, who  
17 provided us with the rationale for international trade.  
18 The important thing was he distinguished between  
19 absolute and comparative advantage. Comparative  
20 advantage is something on which you have the greatest 15:58  
21 comparative or relative advantage over others,  
22 economists will call it having the lowest marginal  
23 cost.

24  
25 We applied that through Whitaker basically by starting 15:58  
26 with grass, it was the only natural resource and one in  
27 which we had a comparative advantage because of  
28 climate. Basically what we have done since is we have  
29 developed the economy round grass derived products. We

1 have also of course developed a manufacturing base on  
2 low cost labour, but we know where that cost structure  
3 is now and at the same time we built services on high  
4 caliber work force.

16:00

5  
6 As you can see I have my stuff out of sequence. I have  
7 said this model no longer works. Exports have been  
8 flat this past decade. We have, in a sense, been sleep  
9 walking, particularly over last decade, we have not  
10 noticed what has been happening to the structure of the 16:12  
11 economy. The export-led growth has actually  
12 disappeared and been replaced by what was of course  
13 construction-led growth. The social partnership  
14 process in which so many of us invested a great deal  
15 has become simply a recipe for cost increases and at 16:16  
16 the same time for reductions in personal taxes. It is  
17 a model that no longer works. Furthermore we don't  
18 even have an agreed means of controlling  
19 competitiveness inside the Euro zone. We have again  
20 sleep walked into a Euro zone without understanding how 16:17  
21 it is we are going to handle the whole issue of  
22 competitiveness because that is the *sine qua nom* of  
23 being in a single market.

24  
25 what we need, as I said earlier, is a new Whitaker. A 16:19  
26 new Whitaker would begin by look at comparative  
27 advantage, it is a function of market demand. There is  
28 no point in having an advantage in an area where nobody  
29 wants anything. What the market now needs is green

1 products, and particularly Green energy. Ireland has a  
2 comparative advantage in wind, particularly in  
3 offshore, consequently by applying a simple piece of  
4 logic that is where we should be specialising.

16:23

5  
6 Just to make the point: Never ignore the inevitable in  
7 politics. There is a couple of rules about it, it  
8 always happens, don't fight it, something John  
9 O'Donoghue should have learned last week, embrace it,  
10 be ahead of the curve and Rule 4 was applied by Eamon  
11 Gilmore, plain credit for making the inevitable happen.

16:23

12  
13 why I am making this point is that we have to  
14 internalise the inevitable. This is the starting point  
15 of renewal of the economy. My view is, I am sure it is  
16 one that is shared by everybody, is that the low carbon  
17 society, as distinct from the economy, low carbon  
18 society is inevitable. This is going to be the biggest  
19 societal revolution since the industrial revolution  
20 itself. A vision of what this inevitability is going to  
21 be is absolutely essential because that can then  
22 provide a springboard for action, that then gives you  
23 the basis of your plan.

16:25

16:27

24  
25 Let us have a look at what 2050 might be like? I have  
26 dubbed it the "electric economy", and I am not the only  
27 one, many people have done the same thing, in which  
28 electricity becomes the great motor power inside the  
29 economy. There will have been a complete switch from

16:27

1 hydrocarbons to renewal energy power generation. We  
2 will have decarbonised power gen. As Padraig has just  
3 talked about transport will have completely  
4 electrified. There will be sustainable communities, we  
5 will have had to reorganise the way in which we live. 16:39  
6 Every building will have become in itself a distributed  
7 generator, there will be a smart grid, and, as I say,  
8 managed in realtime, both on the supply and demand  
9 side, and energy efficiency will have become the norm.  
10 That is the vision of 2050. 16:59

11  
12 Now if we internalise that we can start working our way  
13 towards it. So we have to reinvent the Irish economy.  
14 We have to reinvent the failed model now, we just have  
15 to leave it aside and reinvent it on the basis of a 17:05  
16 couple of very simple principles, and known of them are  
17 very difficult. There they are, and I say there is  
18 nothing unusual in that formula. Nobody really, when  
19 you think about it, is thinking in this mode, with the  
20 possible exception of Eamon Ryan. 17:06

21  
22 Climate change is obvious, it is staring us in the  
23 face, the challenge has to be in that, so the key  
24 policy question for the Irish policy community is: How  
25 do we do it? How do we take economic advantage of it. 17:07  
26 Until such time that somebody is really, pardon the  
27 pun, electrified by this challenge and imposes on the  
28 policy community it is not going to happen. Hopefully  
29 we have seen the beginnings of this morning.

1  
2 The interesting commonality of the three previous  
3 contribution is the emphasis on the need to export  
4 green energy. We already export 80% of our GDP anyway  
5 in terms of agriculture, 90%, so this is the logic of 17:08  
6 the small open economy, that is what it does that is  
7 the nature of the beast. So we should apply that logic  
8 to green energy unashamedly and exploit wind for  
9 export, that has been the message here this morning,  
10 and let that become now the battle cry for the next 25 17:10  
11 years. I am only going to tell you here, just  
12 reprising what we already know, it is a medium term  
13 solution, I am not saying that it is the long-term  
14 solution for decarbonised power generation, carbon  
15 might play a role yet and there could be clean coal, 17:12  
16 one never knows. I am just repeating all of these  
17 points being ahead of the curve and a once off  
18 transition to the green economy creates a huge export  
19 market potential for us.

20 17:12  
21 It is interesting that when Jacques Delors was elected  
22 as President of the Commission in 1984 he set himself  
23 an immediate target, which was to create an internal  
24 market inside two terms of office, them being four  
25 years, so that brought us to 1992, and it is even more 17:14  
26 amazing to think that he succeeded, with one exception,  
27 which I will come back to.

28  
29 In my view the single electricity market will be

1 created, this is the exception, despite the fact that  
2 we created a single market for everything else, despite  
3 the fact that we created a single currency and created  
4 a European Central Bank we still have not created a  
5 single market for power, this is the last piece of the 17:16  
6 jigsaw of the great European project. In my view it  
7 will have to happen because applying the logic of Jean  
8 Monnet it is necessary, and it will happen if we have  
9 the right leadership, particularly at the level of  
10 President of the Commission, which I think we do have. 17:24

11  
12 It will be based, as the Minister said, on massive  
13 interconnection. It will be based on a super grid and  
14 it will be based on a super grid which is smart. That  
15 is why I am calling it a super smart grid. There will 17:25  
16 have to be a uniform regulatory regime, which there is  
17 not at the moment, that is going to be the great task  
18 of the Commission and the European Parliament  
19 particularly. Common support regimes, I am not saying  
20 uniform support regimes, I am saying common support 17:26  
21 regime applying the same policy as we have, for  
22 example, to VAT and indirect taxation.

23  
24 The European market for power is at least going to  
25 treble by 2050. I am saying treble, it could be a 17:27  
26 significant number beyond that. The arrival of the  
27 electric economy will have transformed demand. We  
28 cannot just now project forward out to 2050 iteratively  
29 because there are step changes inside the system, such

1 as all electric transportation, which is going to  
2 transform everything. We have a situation which most  
3 Member States will need to import renewable energy,  
4 they can't supply it themselves. It is not yet quite  
5 physically possible for Hungary to have a large 17:42  
6 offshore wind industry.

7  
8 This is Ireland's opportunity. Here is the policy  
9 framework. I think the first step we have to have here 17:43  
10 inside the policy community is to separate our thinking  
11 about domestic demand on exports. In my view as of the  
12 moment we are constantly thinking in terms of  
13 satisfying domestic demand from renewable energy and  
14 seriously ignoring exports. Let onshore as a policy  
15 framework, and I am not saying that it need be applied 17:44  
16 100% religiously, let us take that onshore satisfies  
17 domestic demand and that offshore is dedicated to  
18 exports. There is a simple division.

19  
20 Think grass, green grass that farmers use, not the 17:45  
21 other stuff, think that as the analogy, so wind is the  
22 new grass. If Whitaker were applying the thinking that  
23 he did 50 years ago today he would be looking not at  
24 agriculture he would be looking at wind as the natural  
25 resource, which this country has the greatest 17:46  
26 comparative advantage, with a huge export market on its  
27 doorstep. We export 90%, as I said earlier, of grass  
28 product so why not wind.

29

1 what we need, first of all, are the means of exporting  
2 electricity, they don't exist the minister has referred  
3 to interconnection. We don't have as yet access to  
4 other Member States' markets because each market is  
5 basically siphoned or hived off from the other. This 17:48  
6 is a big unfinished job to be done here. We tonight  
7 have a level playing pitch yet with brown power, as we  
8 know, what we need now I think, and I apologise in this  
9 audience particularly for using the word "plan" but I  
10 mean that, what we now have need for is a national 17:49  
11 development plan. We also have the need for the  
12 engineering capacity, which we don't have, to build, to  
13 generate and to service offshore wind. I think they  
14 are the basic essentials.

15  
16 Let us stop thinking in a box. I am fed up with this 17:50  
17 idea that we are an island off an island, as if somehow  
18 we were next door neighbours to Iceland, or even worse  
19 Greenland. We are not. There is where we are. We are  
20 at the heart of Europe. We are next door to the 17:58  
21 biggest continental market for power in the world and  
22 what we need are the super highways to get there, and  
23 they are easily worked out geographically. There is a  
24 northern one which goes through Nord Pool and brings  
25 you into Northern Germany. This is and eastern one 18:01  
26 which brings you across through Holland into middle  
27 Germany. Of course the south, if you want to go  
28 through France it brings you into Germany yet again.  
29 So each time you wind up thinking of Germany. I using

1 Germany as a sort of synonym for the whole of the  
2 market. I am simply saying Berlin is next door. There  
3 is the distance. Interestingly there is an  
4 interconnection which is twice the distance inside one  
5 country and nobody thinks very much about it, they are 18:05  
6 just doing it. We tonight yet think that Berlin is  
7 next door. It only costs €15, plus the taxes, of  
8 course. So think global, Berlin is next door. "Wie  
9 geht Hans" should be our constant cry every morning:  
10 "How are you doing?" 18:05

11  
12 Let us think in terms of being at the heart of Europe.  
13 If that is the case we have to have this open  
14 electricity market. I know the Commissioner is working  
15 very hard on this, as is others, but why nobody take on 18:11  
16 the ambition of creating the open electricity market,  
17 as I am calling it. Why doesn't this country take this  
18 as it is project, in its own self interest as well, of  
19 course, as the interests of Europe as a whole, by  
20 creating a common electricity policy just like the 18:12  
21 common agricultural policy.

22  
23 Two weeks ago I was in Cavan town, where I had not had  
24 the great fortune of being for the previous year 40  
25 years, but I suddenly found myself there setting up a 18:13  
26 very important organisation in terms of the yes vote.  
27 The guy who introduced it said something very simple,  
28 he said: "50 years an 0 go we set up this project  
29 simply with two object in mind, one was to stop killing

1 each other and the other was to feed each other."

2  
3 The principles of the common agricultural policy are in  
4 fact very complex, the system that has been worked out  
5 is profound. We can use it as an analogue for creating 18:15  
6 a common electricity policy, we don't have to reinvent  
7 the wheel here, we have all of the analogues that we  
8 need in order to create it but we have to think in  
9 these terms now, inexactly the same terms as not  
10 killing each other and feeding each other. We now have 18:17  
11 to ensure that we all have sufficient energy. Apply  
12 the competition rules to competing forms of power  
13 generation because we have to think about the hidden  
14 subsidies for all forms of prone power, and indeed for  
15 nuclear, and the fact that the competition rules are 18:18  
16 not applied in this area yet.

17  
18 What we need is the vision and the courage of a man  
19 like Peter Sutherland who took the two articles, the  
20 competition articles in the Treaty, which had not been 18:18  
21 done before, and applied them and enforced them, and  
22 then we wind up with something utterly and totally new,  
23 for example such as a new aviation industry.

24  
25 Our two greatest allies are going to be the climate 18:20  
26 change challenge and President Putin, and the more he  
27 gets annoyed with the Ukraine as far as I am concerned  
28 the better because it will impel us into action.

29

1 I have said this before, we were built upon a singular  
2 vision, we created an organisation in 1960, then the  
3 Foras Forbartha, in 1970 it became the Industrial  
4 Development Authority. We created allow tax regime and  
5 we had grants for employment. Interestingly throughout 18:27  
6 this whole period we had a focus on food, farmer, IT  
7 and finance. The freedom given to the IDA at the time  
8 was like a state within a state, so, by way of, is the  
9 ESB. When I was Chairman of Bord na Mona I know the  
10 powers we were given, the Dublin Development Docks 18:29  
11 Authority, NTMA. We have the analogues. What else do  
12 we need if we have the plan to put it into place? You  
13 need a body with a statutory base and with the freedom  
14 to go ahead and do it and not be too encumbered, if I  
15 may say so, despite the fact some of my distinguished 18:31  
16 colleagues are in the audience, not be too encumbered  
17 by the Civil Service.

18  
19 Look at the present chaos to which Brian has referred  
20 earlier, and I am not going to go through it all, you 18:32  
21 know that the scene is currently littered and nobody is  
22 pulling it altogether, littered with different  
23 agencies, sometimes competing, and nobody is pulling it  
24 altogether.

25 18:33  
26 What we need is this development agency which is going  
27 to identify the development zones off our shores not  
28 yet done, which is going to prioritise grid  
29 reinforcements to service those zones, which is going

1 to ensure the socialisation of the grid connection  
2 costs, and without that step, in my view, nothing  
3 really will happen. We have to choose the onshore  
4 support and supply centres, particularly off the west  
5 coast, plan labour force development, probably the 18:35  
6 biggest bottleneck is going to be manpower on woman  
7 power and select the value added activities to be  
8 developed.

9  
10 I don't think we have got there yet at all on this. We 18:35  
11 all know that is the agenda but there is no really  
12 serious thinking on it and none of us could pull  
13 anything out at the moment and say: that is where we  
14 have got so far on this. I certainly don't know of  
15 any. What we need to do is create critical mass, and 18:36  
16 the Minister referred to this. Let us have one  
17 starting point here. Offshore wind is a new industry,  
18 an expression we have used is it is not onshore with  
19 webbed feet. In particular what we have to do with  
20 offshore is that we have to learn how to manage the 18:37  
21 development risks, which are quite considerable, and we  
22 have to build the structures on and offshore to service  
23 this new offshore. I am simply suggesting that we  
24 tackle this systematically, the Minister was going  
25 there in his contribution, of laying the foundations, 18:40  
26 creating the critical mass and then you start  
27 exporting.

28  
29 What I think our common sense is telling us is that the

1 first phase will take about five years, that is to get  
2 everything ready. Phase two, that is building the  
3 critical mass, about another ten years, on which you  
4 will focus on building about 2,000 megawatts and phrase  
5 three starting round 2025.

18:42

6  
7 What is going to be our target? How big are we going  
8 to think? Are we going to start thinking niche again?  
9 I hate niche. I don't know about you but I hate niche.  
10 We are not small. We are as big as we want ourselves  
11 to be and we should think in terms of being the biggest  
12 that is going to be round by 2050. That 20,000  
13 megawatts will not at that point appear to be all that  
14 great because it is currently what the Germans intend  
15 to build inside a very short period of time.

18:43

18:44

16  
17 I have just listed out what I think are the phase one  
18 essentials: we need a new form of public/private  
19 partnership. The model we have is not working and it  
20 will not work in this particular area it has to be  
21 completely taken down and redeveloped. We need a refit  
22 that gives developers a return to match risk. It is  
23 not difficult to work out what the refit should be in  
24 terms of sense per kilo watt hour. You take a rate of  
25 return that you think is reasonable, you know what your  
26 capital cost is, you know the time period over which  
27 that has to be amortised and ergo it is a simple  
28 mathematical job to work out what the refit should be,  
29 and of course it should be proofed against inflation.

18:44

18:45

1  
2 We need policy certainty for debt providers because  
3 without the debt providers there is no development. We  
4 need PPAs which give comfort to long-term investors,  
5 they are going to be responsible for the off take along 18:48  
6 with the utilities. The utilities don't necessarily  
7 need a PPA but financial investors do. Fast tracking  
8 the planning and consenting procedures, that has been  
9 mentioned here this morning and it is so self-evident  
10 but it requires that agency to knock all of those heads 18:49  
11 together. Grid reinforcement, the socialisation of the  
12 costs that I mentioned earlier. Building strategic  
13 partnership with suppliers. In a world in which there  
14 is going to be huge increase in the supply of wind  
15 there is going to be huge bottlenecks in terms of 18:50  
16 supply and if we don't get in there quickly and create  
17 these long-term strategic partnerships we are going to  
18 find ourselves left out and one for another morning on  
19 its own, the whole necessity for green banks.  
20 I am not going to go through the economic benefits, 18:51  
21 Brian listed those at the very beginning, and this  
22 organisation performed a very important task of  
23 identifying and quantifying those very recently.  
24 Simply to say, if you were looking for a job creation  
25 stimulus programme here it is ready made. 18:53  
26  
27 My conclusions are that smart economy is the flavour of  
28 the month, but this is the smart economy because it  
29 embraces the inevitable, it makes perfect use of

1 comparative advantage and it will come about through us  
2 using our imagination. It is quite feasible, it is  
3 quite feasible to be biggest supplier of renewable  
4 energy in the whole of Europe if we wanted to be.  
5 There is no limit on the resource round us, none 18:54  
6 whatsoever. Thank God we are surrounded by water, a  
7 lot of it. You heard we have eight to nine times more  
8 water than we have land, that is what we should be  
9 exploiting.

10  
11 As I come into work every day through Eamon's  
12 constituency there is a building site which has a  
13 quotation from Horace translated for us all into  
14 English, but it is the most beautiful one, and you all  
15 know the expression *carpe diem*, not least from that 18:56  
16 wonderful movie, Dead Poets Society, seize the day, the  
17 quote action says: "while we are talking envious time  
18 is fleeing, seize the day, put no trust in the future."  
19 I think it is time for us to seize the day and to have  
20 a lot of trust in the future. Thank you. 19:01

21 **CHAIRMAN:** Brendan Halligan never  
22 ceases to disappoint. I  
23 think you have heard it here today, wind is the new  
24 grass. Remember where you heard that for the first  
25 time. 19:02

26  
27 I am very pleased that Minister Ryan has stayed along  
28 with Padraig McManus and Brendan Halligan to take some  
29 questions. We are going to take questions over the next