

DÁIL ÉIREANN

AN COMHCHOISTE UM CHUMARSÁID, GNÍOMHÚ AR SON NA HAERÁIDE AGUS COMHSHAOL

JOINT COMMITTEE ON COMMUNICATIONS, CLIMATE ACTION AND ENVI- RONMENT

Dé Máirt, 2 Aibreán 2019

Tuesday, 2 April 2019

The Joint Committee met at 5 p.m.

MEMBERS PRESENT:

Deputy Bríd Smith,	Senator Terry Leyden,
Deputy Brian Stanley,	Senator Tim Lombard,
	Senator Michael McDowell,
	Senator Joe O'Reilly.

In attendance: Deputies Dara Calleary and Lisa Chambers and Senators Paddy Burke, Rose Conway-Walsh and Michelle Mulherin.

DEPUTY MICHAEL LOWRY IN THE CHAIR.

The joint committee met in private session until 5.15 p.m.

Energy Plant Certification: Commission for the Regulation of Utilities

Acting Chairman (Deputy Michael Lowry): We are now in public session and will begin our discussion of the decision by the Commission for the Regulation of Utilities, CRU, on the application by Mayo Renewable Limited for a high efficiency combined heat and power, HE CHP, plant certificate. I welcome Dr. Paul McGowan, chairman, Ms Aoife MacEvilly, commissioner, Ms Karen Trant, director of energy networks and Mr. John Melvin, director of energy markets, all of whom are representing the CRU.

I wish to draw the attention of witnesses to the fact that by virtue of section 17(2)(l) of the Defamation Act 2009, they are protected by absolute privilege in respect of their evidence to this committee. However, if they are directed by the committee to cease giving evidence on a particular matter and continue to do so, they are entitled thereafter only to qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and asked to respect the parliamentary practice to the effect that, where possible, they should not criticise nor make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable. I also wish to advise that any submission or opening statements furnished to the committee will be published on the committee website after this meeting. Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official either by name or in such a way as to make him or her identifiable. I ask everyone to turn off their mobile phones.

The format of the meeting will be that the witnesses make their opening statement, which should not be any longer than five minutes. I understand that they will also make a short presentation after which we will have a question and answer session, when each member may ask questions not exceeding three minutes. I ask members to wait until the presentations have concluded before putting questions to the witnesses. I now invite Dr. McGowan to make an opening statement on behalf of the CRU.

Dr. Paul McGowan: Good afternoon. I am Paul McGowan, chairman of the CRU. As committee members are aware, the CRU is the economic regulator for the energy and public water sectors in Ireland and safety regulator in the energy sector. Our mission is to protect the public interest in water, energy and energy safety. My colleagues and I welcome the opportunity to meet the committee today to discuss our role in HE CHP certification and to provide an overview of our decision to award a partial HE CHP certificate to Mayo Renewable Limited. I will now hand over to my colleague, Ms Aoife MacEvilly, who will outline our role in HE CHP certification. Our directors of energy networks and markets, Ms Karen Trant and Mr. John Melvin, will then provide more detailed information on the certification process and on this particular application.

Ms Aoife MacEvilly: The CRU's role regarding HE CHP is set out in Irish legislation which transposed certain provisions of the European energy efficiency directive of 2012. The aim of this directive is to improve the EU's security of supply by reducing primary energy consumption and decreasing energy imports. It is also aimed at reducing greenhouse gas emissions in a cost-effective way and thereby mitigating climate change. The directive specifically addresses HE CHP and provides a detailed methodology and criteria in annexes 1 and 2 on how to cal-

culate the efficiency of the CHP process. European and Irish legislation, therefore, is detailed, technical and prescriptive. In 2012, following a public consultation process, the CRU set out its role and detailed guidance on how we would process HE CHP applications in a policy paper which gives further effect to this legislation. That is CER/12/125.

The methodology and the engineering analysis carried out on each application can be complex and must be applied by the CRU for all HE CHP applications. The assessment is based on specific information, including, technical and financial values provided by the applicant, which are then used to arrive at a specific answer regarding certification. The focus is not so much on the technical specification of the plant itself, although that is examined, but rather on the useful heat produced by the plant and whether this useful heat is economically justifiable and delivers primary energy savings, PES.

The CRU appreciates the committee has a broad remit and it is concerned with the regional economic impact of our certification decision regarding Mayo Renewable Limited. We are obliged to balance a range of competing priorities such as competitiveness, security of supply and sustainability when reaching many CRU regulatory decisions. Our role as the body appointed to certify HE CHP is prescribed in narrow and technical terms. It does not allow for consideration of broader economic, social or environmental factors. My colleagues will give an overview of this process but, in short, our role is to take the business case submitted by the applicant and apply the HE CHP methodology as prescribed in law.

We consider the rigorous application of this methodology important given the significant benefits arising from HE CHP certification. Those in possession of certificates gain priority dispatch in the all-island electricity market and can also avail of certain Revenue rebates. In addition, and perhaps most important, HE CHP certificates allow applicants to avail of relevant payments through the renewable energy feed-in tariff, REFIT, scheme. The REFIT scheme is funded by electricity customers through the public service obligation, PSO, levy charged to their electricity bills. The REFIT payments for HE CHP are among the highest level of REFIT payments available under the scheme and can be as high as hundreds of millions of euros over the 15-year term.

To give an example, REFIT payments for a plant of a similar scale to Mayo Renewable Limited, with a 100% certificate and operating at full output, could be in the order of €31.6 million annually, based on 2019 figures. If similar payments were made each year for the 15 years of the REFIT scheme, the total payable could amount to €474 million. Members will understand, therefore, why it is so important that the assessment for HE CHP certification is carried out by the CRU in a robust way to protect the public interest. In addition to the initial certification process, the CRU also audits the HE CHP plants awarded certificates to ensure that they are delivering useful heat and primary energy savings in line with their certification.

The CRU has amended HE CHP certificates based on actual outcomes following audits. The HE CHP certificate is not, therefore, enduring in nature and can be amended when circumstances change. This is also why there is a time limit for planned HE CHP certificates, beyond which a new application must be made if the plant is not operational. It would be expected after five years that the inputs to the application, including the business plan and economic factors such as prices, would have changed and warrant a new application. I hand over to my colleague, Ms Karen Trant.

Ms Karen Trant: I will present the committee with a high level overview of the certification process.

Senator Michelle Mulherin: Are copies of the presentation available?

Ms Karen Trant: Yes, it should be on the screen in front of the Senator. The HE CHP certification process is designed to ensure that the plant meets the high efficiency criteria set out in legislation. The HE CHP process is defined on the basis of primary energy savings. Applicants are required to submit all relevant information to substantiate and support an application and to demonstrate qualification as HE CHP. It is important the applicant demonstrates that he or she meets the criteria. Applicants and applications will be certified based on available data. If a plant exists actual data will be used and if a plant is planned then projected data will be used to assess a planned plant certificate.

The HE CHP is used to replace heat generation from conventional fuels in a number of difference processes. These could include heating swimming pools or drying products such as woodchips and biomass. We have supplied a picture to the committee of a facility for milk drying. An economic justification must exist for the process in the absence of CHP. That is an important point. A primary energy saving must also exist to achieve HE CHP certification. What conventional fuel generation process is being replaced? Examples include oil, gas and diesel. In the case of a planned plant, the details I have referred to must be shown via the demonstration of an alternative case. That is a hypothetical business case demonstrating what will be in place in the absence of the HE CHP plant.

There are a number of components to the process. They are enshrined in the legislation and we have transposed them into domestic legislation and into our policy document. Three elements are involved. The first is useful heat where the applicant must demonstrate that there is an economically justifiable demand for heating or cooling, as the case may be. This is demonstrated in the case of a new plant by providing an alternative case. It must show that the business would be commercially viable in the absence of a CHP unit. The second factor involved is primary energy savings. If the applicant has demonstrated that the demand is a useful heat then he or she must demonstrate, via the alternative case, that there are primary energy savings. The CHP plant must have a PES of at least 10% to be certified as HE CHP. The third element examined is the technical detail. The CRU uses much granular technical data to assess the technical data and determine the level of subsidy that can be awarded.

We then examine the overall efficiency. There are different thresholds to demonstrate overall efficiency. Regarding Mayo Renewable Limited, the threshold must exceed 80% if it is to receive a 100% HE CHP certificate. If the overall efficiency is below 80%, then the amount of electrical energy output eligible for the HE CHP certificate is determined on the basis of the power to heat ratio. If that is not available, the legislation contains a default ratio and that is what would have been used in the case of Mayo Renewable Limited.

Turning to the certification process, we assess all applications on their own merits. It is a matter for the applicant to demonstrate, through the data provided to the CRU, that the plant qualifies for HE CHP. We assess all the documentation and information we receive. All planned certificates are issued and valid for five years. The certificate expires if the plant has not become operational in that time and a new application must be completed. Unlike planning applications, we do not have a mechanism whereby we extend the certificate.

Importantly, once the plant becomes operational, an audit is carried out 14 months after that date and the actual outputs from the plant are assessed. For a small number of existing plants, the CRU has changed the level of certification or issued no certification based on changes in the actual performance data of the plant when audited. Since 2012, the CRU has issued 113

HP CHP certificates. Of those, 79 have been for existing plants and 34 have been for planned plants. Some 20% of those 34 were for partial certificates. No planned plant has become operational or provided actual output data.

Regarding the application for Mayo Renewable Limited, I have outlined the timeline from when we received the application in May. We interacted with the company in June, July and August and we were ready in September 2018 to issue a decision. We then spoke to Mayo Renewable Limited before the recommendation was made to the commission for a final decision. It then asked for a postponement of that decision so that it could respond with further information. We agreed to that postponement. In October 2018, we appointed new consultants because our existing tender contract had expired. We brought our new consultants on board and they again reassessed the application. In October and November, additional information was submitted by Mayo Renewable Limited and in March 2019, having exhausted that process, the CRU issued a decision. The decision was for a high efficiency combined heat and power certificate for 18%.

The application from Mayo Renewable Limited was made by a different legal entity from the application that was submitted in 2012, which was submitted by Mayo Renewable Power Limited. Mayo Renewable Limited submitted three alternative cases. The first is the one we used to assess the HE CHP certificate. It does not demonstrate that all of the proposed heat export is useful heat. Alternative case No. 1 presented by MRL in 2018 demonstrates that if the co-generation CHP plant was not built, it would still be economically justifiable to build but only if a higher efficiency dryer was used. In its actual business model, MRL proposed a lower temperature energy dryer.

Alternative case No. 2 presented by MRL was withdrawn because the application of the alternative case could not be assessed on a like-for-like basis. Alternative case No. 3, which was presented by MRL in 2018, used a data centre to try to demonstrate primary energy savings. We did not agree that a data centre meets the requirements for an energy generation process for the purposes of the assessment.

Acting Chairman (Deputy Michael Lowry): I thank the witnesses. By way of explanation, Senators have been called to a Seanad division. I invite members to ask questions not exceeding three minutes.

Deputy Dara Calleary: I thank Deputy Naughton and the secretariat for arranging this meeting and the representatives of the CRU for attending. As Ms MacEvilly said, the joint committee has a very broad remit. We are here to defend a €90 million investment, which has already gone into the ground and was invested on the basis of certification awarded in 2012. While Ms Trant stressed that the company involved was a different legal entity in 2018, the project remains the same. It is the project that was authorised in 2012 by the body that the CRU replaced. That authorisation was the key to the €90 million that has gone into the ground. This figure had not been plucked from thin air. Construction has taken place, 130 people are working on site and the project offers major potential. The CRU's decision has caused frustration and this meeting has been arranged to try to get an understanding of it. What changed in the project, as opposed to the legal entity, between 2012 and 2019 that resulted in a 100% certificate being issued in 2012 and an 18% certificate being issued in 2019?

Ms Trant said that no planned plant has become operational. I have a few questions to put to the CRU in this regard. Is it a matter of general concern that considerable investment is made in drawing up applications, which I presume require significant CRU staff time to process, yet

none of the proposed plants has become operational. How does this compare internationally?

Was the CRU's ruling in respect of the data centre based on policy or judgment? How does it stack up internationally? Those are my questions for the time being but I will contribute again.

Dr. Paul McGowan: I will ask my colleagues to respond on what has changed in the project since 2012. We will also deal with the other two questions. We will take them in the order in which they were asked.

Mr. John Melvin: The plant proposed in 2019 is broadly the same as the plant proposed in 2012, but the latter can be used in different ways. One of the key differences between 2012 and 2019 is the cost of the fuel input. In 2012, the fuel input was a much lower cost for fuel imported from the United States in a very dry state. The plant was to take wet biomass from Ireland and dry and sell it in the Irish market. Appropriately dried wood chips would be a very valuable finished product. In the 2018 application, the same plant was proposed to be used but using a different fuel input. The 2018 business plan was to use some 70% of the dried biomass output of the plant to burn in the plant itself. As this was a very valuable product, the price of the fuel input changed greatly between 2012 and 2019. In essence, whatever piece of equipment one is using, the economic justification will depend on the cost of the fuel versus the benefit of drying things. A low cost fuel in 2012 using the particular machine the company included in the application, which was a relatively low efficiency machine, could meet the business case. It could demonstrate there was a justifiable economic use for the heat in 2012.

In 2018, however, by using the much more expensive fuel, namely, the finished product of the plant, it would not necessarily be the case that the same low efficiency machine would justify the heat load at that high a price. The same machine is used in a different way but the key difference is the cost of the fuel input. What makes economic sense with a low cost fuel does not necessarily make economic sense with a very high cost fuel. We apply highly technical legislation and the very first step is to ask what is the justification for the heat. If the fuel is very expensive, one would need a very efficient machine to make it justifiable. If the fuel is very cheap, as it was in the 2012 application, a low efficiency machine can meet the justifications. That is a key difference. It was the same machine but a very different business case.

On the question on the fact that not one planned plant has become operational, there would be a relatively small number of planned plants. They take a long time to build, perhaps four, five or six years. There is one other very large planned plant that is tied up with a gas importation terminal and there are other elements behind the particular delay in that piece of equipment coming. It would not be unusual for the planned plant certificate to pre-date construction or operation by a number of years. We put a five-year limit on that. Five years is a reference figure in the European Union legislation that guides this whole process. Certain elements of those plants are tied in with the refit scheme. Timelines on the refit scheme also drive when some of the planned plants may commence operations.

On the data centre question, if a data centre is already in place and uses electricity, the processing of the data creates a large amount of heat, which is a by-product of data centres. This heat may be used to dry woodchip. If a HE CHP plant is built to replace this, no energy will have been saved because the data centre is still generating waste heat and rather than drying the biomass chips, someone is burning biomass elsewhere to dry the biomass chips. The first of two key steps in the EU legislation is to ask if there is useful heat and a business case for the heat process. The second key step is to ask if what is being planned makes it more efficient

than the alternative. If the alternative is a data centre, it will use the same energy irrespective of whether HE CHP plant is in place. In essence, therefore, no primary energy saving will be achieved compared with getting heat from a data centre.

Ms Aoife MacEvilly: On the issue of the planned plants, we understand that one such plant will come into operation soon. We hope to see more such plants open over time. Our decision on the data centre is also based on the legal definition of the energy generation process, which is set out in law. We could not see any case for the use of electricity in a data centre being considered as energy generation, which is the requirement under both the directive and Irish law.

Deputy Dara Calleary: Are our guests sure about the change in the fuel make-up? Are they sure that the fuel input, make-up or element of this project has changed?

Mr. John Melvin: It is a very different plan from the 2012 one. For example, the publicly available documentation shows that in respect of the period between the last time it obtained an EPA licence and the present, it proposes to use a different fuel. Similarly, the 2018 application is clear that up to 70% of the finished product will be burned and will be the key fuel for this facility. That was not the case in the original 2012 application.

Deputy Dara Calleary: The EPA licence was renewed. Surely it may have had questions if there is a major change in the fuel.

Mr. John Melvin: Regardless of whether it had questions, it notes that there was a previous IPC licence here and that the fuel proposed to be used is different in the new licence application. It clearly then evaluates whether that makes a difference from an emissions viewpoint, which is its concern in this regard.

Deputy Dara Calleary: What is the way forward if we are to save this project which the CRU obviously felt in 2012 was of national importance? We are here because it has extremely important regional significance in terms of employment, the environment and a site that needs to be renewed and regenerated in every possible way.

Ms Aoife MacEvilly: We completely appreciate that. Although we cannot take it into consideration in our decision-making, we are aware of that context. It is open to Mayo Renewable Limited to come in with a new application. Through this process, we have tried to engage with it and provide it with as much information as we could so that it could understand why the previous application did not meet the criteria so that it might be in a position to put in an application that did. Having said that, it is very important to say that it must be a realistic application. It must be credible. Most importantly, if we give a certain level of certification, if we go back there after the 14 months, it must also be credible in terms of Mayo Renewable Limited being able to demonstrate what the heat used is so that we can renew the certification on the same basis. The worst case scenario would be for a higher certificate to be issued and a lower certificate to be issued based on the actual data from the plant so it must be credible, realistic and available to audit when we go back after a while. If it comes in with a new application, we will certainly look at it on its merits.

Deputy Lisa Chambers: I thank our guests for their presentations. We appreciate the opportunity to ask questions. As my colleague outlined, this represents significant investment in the west of Ireland and County Mayo. There has been a significant outlay of investment. This project was hugely welcomed by the community so we are very disappointed to see that we are at this stage.

I understand that a question has already been asked around what changed. Besides the name and the entity, what changed in the project? I take on board what Mr. Melvin said about the fuel composition changing. Did anything else change because in her initial statement, Ms MacEvilly stated that the assessment is based on specific information? When the first application was made, what specific information that was provided in 2012 was not provided in 2018 or have the CRU's processes changed in the intervening period?

Ms Aoife MacEvilly: Our process have not changed. In 2012, we published a very detailed process as to how we would process the applications. We have certainly learned as we have gone through the 113 applications but the process is effectively the same. The application has changed. Looking at this from the outside, I appreciate that Deputy Lisa Chambers's question is valid. It is the same plant. It is the same technical specification of plant but, as we have explained, the key focus at which we are looking is the business case for the heat use. That is the data that has changed. The data provided by the previous applicant, as Mr. Melvin outlined, was about importing a cheap fuel to burn in the plant and then selling a high-quality fuel into the Irish biomass market. The application we received in 2018 was different. It had a different business case for the heat use. As Mr. Melvin has explained, it was using that high-quality fuel within the process to burn as the fuel for the plant. The economics have changed quite dramatically. Mr. Melvin might be able to go into this a bit more. In respect of the justification provided by the applicant, it demonstrated to us that this could be done on an economic basis but by a much more efficient process. This is why when we issued the certificate, it was a partial rather than a full certificate because in a way, the new application was only demonstrating that part of the output of the plant would be efficient in line with the criteria. Perhaps Mr. Melvin can address that.

Mr. John Melvin: The key difference related to the market conditions and the business plans of the promoters. In 2012, the promoter had a business plan that involved a low-cost fuel and a relatively low-efficiency dryer but that made economic sense because the fuel cost is low and the company can use a lot of it to make the finished product. That stacked up in 2012. For whatever reasons or perhaps as a result of market changes that took place in the mean time, the business case proposed in 2018 was different. It now stated that the plant would consume 70% of the high-value finished product and burn it. In giving the economic justification for that, the applicant demonstrated that at that price of fuel, if the alternative was a high-efficiency dryer, it made economic sense. We agreed that if the hypothetical alternative is a high-efficiency dryer, it makes economic sense but the big difference is that this high-efficiency dryer that demonstrated the economic sense uses less than a third of the fuel the machine on the ground uses.

Deputy Lisa Chambers: It is my understanding that the plan was to continue to dry some fuel and sell into the market. Is Mr. Melvin saying that the CRU made it very clear to Mayo Renewable Limited that it was this fuel that was the issue? Was Mayo Renewable Limited informed all the way through that this was the issue. Is this the only issue? Mr. Melvin is stating that the CRU did inform Mayo Renewable Limited.

Ms Karen Trant: We have had significant interaction with Mayo Renewable Limited since May 2018. It has had sight of the report outlining the issues as the consultants or technical experts saw them. As Mr. Melvin stated, each application is assessed on its own merits and must be within the market conditions as they are today. Mayo Renewable Limited is aware of the issues we identified within that report. It is important that, as an applicant, Mayo Renewable Limited is able to demonstrate how it can meet those issues. It is not up to the CRU to provide advice to relating to that but the report sets out the issues.

Mr. John Melvin: If Mayo Renewable Limited's plan is to burn the output from this facility - 70% of it - it is appropriate that this is the business plan it presents at this point because we must audit this under law. If, 14 months after it was built, it turned out that rather than the imported low-cost fuel, the facility was burning the very high-quality output, that would be a different use of the machine and would have a different economic justification. If that is its business plan, then it is right and appropriate for it to advise us of that fact at this time before any further money is spent or business decisions made because, ultimately, if that is what the applicant proposes to do when the plant is up and running, that is how it will then be measured. It is appropriate to understand that now. When we stated-----

Deputy Lisa Chambers: I am sorry to interrupt. Mr. Melvin mentioned a five-year cut-off.

Mr. John Melvin: Yes.

Deputy Lisa Chambers: Is that specified in the directive as being mandatory, or is that Mr. Melvin's interpretation, or where did the five years come from? Was the applicant informed of the five-year deadline all the way through the process? I know I am going to be tight for time so I will ask a final question. Did the commission receive any objections, either before or after the initial granting of the certification, or correspondence from any other entity about the application by Mayo Renewable Limited at any stage of the process? Has anybody else contacted the commission to raise objections or concerns about this application?

Dr. Paul McGowan: I am not aware of any objections that were raised in respect of this. In fact, I am not aware of any objections raised with regard to any HE CHP application. We have, of course, received correspondence about it but I would not say that there were objections. There was correspondence in support of the application, for example.

Deputy Lisa Chambers: Was there any correspondence not supportive of it?

Acting Chairman (Deputy Michael Lowry): There is another vote in the Seanad.

Deputy Lisa Chambers: Can our guests answer that question? Was there any correspondence that was not positive?

Ms Aoife MacEivilly: Not to my knowledge, no.

Dr. Paul McGowan: Not to my knowledge, no.

Ms Aoife MacEivilly: It is not a public process.

Senator Michelle Mulherin: I have not had the benefit of hearing everything our guests have said because I was required for a vote in the Seanad. Another vote has just been called. Are they stating that, because the wet matter comes in and is dried and will be fed back in to generate electricity, this is an issue for the commission and that was not the position previously?

Mr. John Melvin: Essentially, the business case is to take wet matter and dry it and it then becomes valuable but burning that valuable fuel is an entirely different business case and leads to an entirely different justification of the heat load to the previous business case which was burning a very cheap imported fuel. It is the big difference, and the major driver of the difference, between the 100% certificate in 2012 and the 18% certificate in 2019.

Senator Michelle Mulherin: Mr. Mulvey is saying that the previous proposition was that they were importing dried biomass and the necessary moisture had been taken out. Is he stating

that was the format in which it was coming in? It was not going to be dried in the-----

Mr. John Melvin: The key factor is the cost of the fuel. From discussions with the applicant around that time, I understood that the matter was coming from the US. This is not my area of expertise but according to the applicant, under US law, one must clear out the thinnings from forestry in order to avoid the risk of forest fires. Therefore it is a cost to forestry companies and there is a surplus of naturally dried chippings and wood like this. In essence, it was cost effective to ship that across the Atlantic to Dublin, move it across the country and burn it in Mayo at a lower price than similar fuels could be obtained here. That was the case at the time and then what the applicant said in the 2018 case was that it was going to burn 70% of its finished product. That is a valuable product, has a very different price and leads to a very different economic justification.

Senator Michelle Mulherin: Is Mr. Melvin saying that, by virtue of the model or proposition that is now before the commission, this is going to cost the Exchequer more or is he saying that the applicant is basically burning a more valuable resource? I assume the applicant will get a certain amount per megawatt up to the level that the commission gives certification for, which is 45 MW. Surely the duty and need is on the private investor to ensure it is going to make some money out of this and, if it is burning something more expensive, the commission is not going to be handing over any more money. Is that correct?

Ms Aoife MacEvilly: There is no issue with the fact that it is auto-consumption of its own fuel. It just presents a different business case for us to assess. The Senator is inquiring as to why, if the developer believes it has a justifiable business case, the commission probing beyond that. That is the nature of the assessment that is set out in law for us to conduct. Given the scale of the support that is given to biomass HE CHP, it is not enough for the developer to state it can take that large amount of money and come up with a business case and that is sufficient justification. We are asked, under the law, to consider is this a heat use that would be economically justifiable under market conditions if the CHP plant did not exist. That is why we are looking at it from a different perspective than, say, the developer. That is why we ask for an example of how this would be produced in the market in an efficient way.

The simple example we come across when we are looking at a HE CHP plant is where there is an existing heat load. For example, in the presentation, there was a milk drying unit which perhaps had been using an oil-fired generator to produce the heat. A HE CHP unit comes along to replace that. Obviously, there was a business case for drying the milk with the oil-fired unit so we know there is a commercial case for that use and then the HE CHP plant is introduced to replace those oil boilers. One then has better use of the heat and has created primary energy saving. That is the simple case.

When it comes to a planned plant such as that in Mayo, it is more difficult to assess and we have to use this alternative case, as we call it, which is almost like a hypothetical judgment around whether, under market conditions, somebody would dry this biomass as a business in the absence of the CHP plant. That is how the economic case is justified.

A more expensive input means expensive heat to produce so there must be an efficient unit to do it and sell it under market conditions. What has happened in this case is that we have looked at the 2018 application versus the 2012 one. There is more expensive fuel, more expensive heat, and a less efficient process. That is why they are falling below the levels which give the full certification.

Senator Michelle Mulherin: Ms MacEville is not referring to drier efficiency. She is stating that it goes back to what is being fed into the CHP plant. Going back to the 2012 certification, the plant had been almost half built. Approximately €100 million had been spent and, on foot of a financial hiccup, the company involved went into liquidation. I assume that the witnesses is aware that the EPA, ESB Networks, EirGrid and Mayo County Council, which extended the planning, treated this as renewable. In some way, has the commission not set a precedent in respect of this? The commission had granted a certificate of high efficiency which would allow the operator to obtain 100% of the feed-in tariff. The commission is stating that the proposition is not the same as before and has materially changed. Is that correct?

Ms Aoife MacEville: Yes, and we have stated that it is not the plant that has changed, because it is broadly similar to or even the same as the one we looked at in 2012. It is absolutely the heat use which is the focus of the high efficiency combined heat and power-----

Senator Michelle Mulherin: Mayo Renewable Limited is going to contract with somebody to use this heat and will make wood chip out of this, etc. The issue is that it is going to feed back, not into the drier but-----

Ms Aoife MacEville: It is the economic test. There is a useful heat but is it economically justifiable? That has changed significantly since the 2012 application. As to precedent setting, the difference between our process and, say, a planning decision or an EPA licence is that our certification is not enduring in nature. When we issue the HE CHP certificate for a planned plant such as Mayo, we make it clear to all applicants that it is five years before that becomes operational. Aside from the fact that it lasts for only five years, after which a resubmission is required, let us say for the sake of example that MRL had continued under construction and had been completed within the initial timeframe. Let us further imagine that having done so, it discovered that for whatever reason it was no longer able to source the cheap fuel from the United States and its original business case had changed. Had we visited after a year of operation and discovered that the actual use of heat and actual process were different from what we had initially certified, we would have undergone a new assessment and would have potentially changed the certification level based on the actual output of the plant. It is not an enduring certificate; it is always subject to the test and audit we put in place. It is quite different from the EPA-type licensing process.

Acting Chairman (Deputy Michael Lowry): I call Deputy Bríd Smith before I return to Senator Mulherin.

Senator Michelle Mulherin: My next question follows on from what Ms MacEville has said, if Deputy Bríd Smith would allow me to continue.

Deputy Bríd Smith: I do not mind.

Senator Michelle Mulherin: Before I left the room, somebody made the point that in recent years since the original decision, the CRU has learned lessons. What exactly has been learned, and what comparable projects are there? Are there other large-scale combustion operations? It is my understanding that there are a number of countries where there are similar types of system but they are certified at 100%. I refer to a number of plants in France and the USA. How is the CRU different and what has it learned?

This is the first time we have received proper engagement or answers on the issue. We can get technical, and it is clear that the witnesses are technically-minded people. I understand

that the CRU will meet with the company, which will have technically-minded people present, but the CRU can deal with that. I would like to speak about policy issues. I have copies of several reports, ranging from the Sustainable Energy Authority of Ireland's report on bioenergy supply in Ireland and a report from Nera Economic Consulting, to reports from Imperial College London and the US Environmental Protection Agency. Based on a decision of the US Environmental Protection Agency on 23 April 2018, forest-based biomass is treated as carbon neutral in the generation of electricity. There is a suggestion that biomass is out of favour. We are in a situation where there is no regulation change and it is virtually the same proposition. Ms MacEvilly referred to change but I understand that there will be a more indigenous biomass supply chain because an agreement has been entered into with Bord na Móna. There will not be, therefore, a large carbon footprint coming across the sea in the form of thinnings from the United States. More will be sourced locally and, in time, local farmers will grow willow. It is all part of the mix.

What has the CRU learned, and where can I or the company read about what it has learned? It seems that the goalposts have been moved.

Dr. Paul McGowan: I assure the Senator that we do not have a view on biomass that it is any more or less favourable than any other fuel. While we have a vision to secure a low-carbon future, in the assessment of biomass it is clear that there is a technical process to undergo. In the case of this particular plant, we have followed the detailed, technical process set out in legislation. The real issues are the economic assessment, whether primary energy savings are available, and how much useful heat is produced by the plant. There is nothing in the process that requires it to be biomass or anything else. It is very much focused on the economic assessment.

The source of the biomass is not relevant to the process. It is the price of the fuel that is factored into the economic assessment. Whether it is produced in the US and shipped or whether it is produced locally, the economic case that is put forward concerns the input cost and the revenue from sales.

I will pass over to my colleagues to discuss the process, what we have learned from it and the question about similar plants.

Senator Michelle Mulherin: It is quite bizarre that when we have renewable heat and electricity targets, on which we have been told we will fall short and for which we face fines, the CRU is concerned about what it costs the company. The CRU stated it will not pay the company any more per megawatt, but it is concerned about the cost for the company of the raw material or the biomass that it uses. The CRU is not concerned, however, about the carbon footprint or the source of the material. A number of members of the committee spent several months examining how we could reduce carbon emissions, move towards a nearly zero carbon economy and so on, but the CRU is focused on the cost for the company. We are losing out on having a licensed biomass plant.

I would appreciate to hear what has been learned and what the CRU can tell the company to do. Did the CRU tell the company that it would not be acceptable if it did not return to the model of importing from the USA?

Dr. Paul McGowan: It is not that we do not care. Rather, the process of economic assessment that we undergo does not consider whether the biomass is imported or indigenous but instead considers the import cost.

On our wider remit and the delivery of meeting targets, we are concerned about working towards those targets, along with all other relevant agencies. As we have indicated, a full HE CHP is a very valuable certificate to be awarded, due to the potential dispatch on the network and the potential access to funds. It is important, therefore, that any body that is certified as such can meet the requirements.

I will pass over to my colleagues to respond to the question on what we have learned.

Ms Aoife MacEvilly: In 2012, when we considered this application, it was a new area for us. Given that the company's business case was to dry biomass and sell it into the biomass market, one of the main questions on which we focused during the economic assessment was whether we could establish that there was a biomass market, that there was a market price and that, therefore, there was an economic justification for that degree of heat output. Several years later, circumstances have changed considerably. We have a well-established framework for understanding, say, if someone is drying wood chips and selling them, what the market is. We have learned a great deal about that. The process has not changed fundamentally but we have a better framework of understanding and testing alternative cases. For example, we have better experience of knowing what an efficient alternative case is and so on, but that is just due to learning. It is the same process with the same test in respect of the legal requirement-----

Senator Michelle Mulherin: Is it not a luxury for the CRU to learn after MRL has spent €100 million? Notwithstanding what the CRU has stated, that is the reality. There is the economic reality and the national reality of our targets, which brings me to my final question. I acknowledge that the witnesses have shown forbearance and I thank Deputy Bríd Smith. Was the CRU's judgment affected by the cash-for-ash problem in the North?

Ms Aoife MacEvilly: No, not directly.

Senator Michelle Mulherin: In what ways?

Ms Aoife MacEvilly: As was stated earlier and reiterated by Dr. MacGowan, the importance of the rigour of the process is only underlined by issues such as cash for ash. It is important to state there is nothing in the application that suggests anything of the sort. In fact, we can say with hand on heart that this applicant has been completely above board, it has given us information that we consider credible, and we have no issue with it. In terms of the rigour of the process, it underlines the public interest requirement to ensure we are not giving a certification level that is higher than is warranted by the application we have received. That is the only part of the context that comes into it.

In terms of the learnings from this case, every regulatory process is about continuous improvement and learning. I do not believe there is any aspect of that learning that would fundamentally change. If we knew everything in 2012 that we know now, the business case was so strong in 2012 that it would have got exactly the same answer. We would have to test that again.

Senator Michelle Mulherin: Did the commission take legal advice before it made this decision?

Acting Chairman (Deputy Michael Lowry): This will be the final question as I need to move on to Deputy Bríd Smith.

Senator Michelle Mulherin: Considering it could be argued that the developer had a legitimate expectation and spent quite a considerable amount of private moneys, was legal advice

sought on abuse of process, property rights and other issues and if the commission could be exposing the State to a law suit?

Ms Aoife MacEvilly: We tested this process every way we could.

Senator Michelle Mulherin: The commission had two consultants. The first set was not satisfactory.

Ms Aoife MacEvilly: That was not the case. The contract happened to lapse at the time in between the first assessment process and the second one. It was just purely a timing issue that one contract expired with one set of consultants and we had just come through a procurement process which appointed a new set of consultants.

Senator Michelle Mulherin: Can Ms MacEvilly give me the dates for that?

Acting Chairman (Deputy Michael Lowry): Ms MacEvilly has answered that question. We will move on to Deputy Bríd Smith.

Deputy Bríd Smith: I thank the commission for its presentation.

Having heard everything, I accept the commission's point about the importance of the rigour of the process in the public interest and that requirement is legislated for.

In the seven years between 2012 and 2019, much has changed with this particular case, as well as the wider case of how we deal with climate change and the urgency with which we address it. We have a report that stated this plant would not be efficient and, therefore, did not get its certification. On the other hand, the Environmental Protection Agency, EPA, gave it a high level rating regarding emissions. The commission examines economic efficiency but the EPA examines emissions. Who looks at the needs of the planet and the reduction of our carbon footprint? Where does that all tie in? There are parallel processes which do not necessarily speak to each other. If it has happened in this particular case, we need to find a solution quickly because decisions on other plants may be impacted.

The commission referred to another plant which is tied up with a gas terminal. Where is that located? Is there an appeals process or a review where engagement can be restarted with this company in order that we might save the day?

Senator Tim Lombard took the Chair.

Dr. Paul McGowan: The Deputy referred to climate change and meeting targets. For example, the current target for renewable electricity on the system is 40% by 2020. By all predictions, we are going to fall a small way short of achieving 40% but will be quite near it. Obviously, we play a role in meeting that target, including, for example, delivering a connection policy to connect renewables to the system. We administer the public service obligation, PSO, levy and we have other functions in ensuring those targets can be met.

High efficiency combined heat and power, CHP, is one of the technologies legitimately identified as assisting towards the achievement of these targets. For onshore wind, there is a renewable energy feed-in tariff, REFIT, scheme and a soon-to-be renewable electricity support scheme, RESS, which may support a particular technology. For high efficiency CHP, it has to be certified as such and must achieve the primary energy savings. Otherwise, it is a biomass power station which of itself delivers on renewable targets, if it were built. There is some support available for that. However, high efficiency CHP carries a higher level of support which is

why it is subject to additional rigours under legislation.

Deputy Bríd Smith: Could it go ahead as a biomass power station with fewer supports from the State?

Dr. Paul McGowan: It could.

As regards an appeal, it is open to the developer to submit an alternative application to us which we will look at on its own merits. The original application in 2012 was from a separate legal entity which had a certain business case. The application in 2018 was from a different legal entity with a different business case. It is quite open to those legal entities to submit another application. We will look at them on their own merits. We do not have a predisposition. We follow the process in terms of assessing whether it achieves high efficiency CHP certification. It is either full or partial. In this case, it was partial and got an 18% partial certificate.

Deputy Bríd Smith: That is low.

If the company in question were to reinvent itself as a biomass energy station, would the commission also assess it?

Dr. Paul McGowan: We do not have a function in assessing that. It would not be looking for a certificate.

Deputy Bríd Smith: However, it would be looking for State support.

Dr. Paul McGowan: It would then deal with the Department because that would come under the support schemes.

Deputy Bríd Smith: What about the parallel processes marrying each other to ensure we can deal with this issue in a holistic way in the future?

Ms Aoife MacEvilly: It has not necessarily come up as a significant issue with this particular type of plant. In delivering more renewables more quickly, a new renewable support scheme is being developed by the Department called RESS. There is a real understanding that our new connection policy for new renewables has to line up with that scheme to ensure applicants have a clear ability to both get the support and the connection.

In the case of offshore, where there is a marine area and foreshore policy being put in place, we are aware that we need to start lining up these processes to ensure we can deliver more rapidly the types of lower cost renewables which are needed, not just for our 2020 targets but for the development of the 2030 targets. We are working with the Department on that and we will work with others as needed to ensure that alignment is in place.

Mr. John Melvin: Sometimes a large energy user, in line with the energy efficiency directive, will look to see if it can co-locate a CHP plant. The timelines for building these can be tied into the timelines for building the actual energy user. There are not that many gas facilities proposed. Rather than name them, can I ask for the Deputy's indulgence and check with the entity to ensure it is okay for me to give her its name?

Deputy Bríd Smith: Yes.

Senator Rose Conway-Walsh: I thank the commission for its presentation.

The point has got across to the commission that this is a serious matter for the local econo-

my in Mayo but also for the promoter of the plant which has invested €100 million. Could the same happen today if somebody was in the same situation? Will the commission confirm that the legislative framework has not changed since the original application was made?

Ms Aoife MacEvilly: That is correct.

Senator Rose Conway-Walsh: What variables have changed? Could it happen that somebody would invest today but find later that the application would be turned down? The stark difference between 18% and 100% is difficult to understand.

Ms Aoife MacEvilly: The Senator is correct that nothing has changed in the legislation or the process. The variables included in the application include not only the plant and its specification but the heat use and the alternative cases. Many of those variables are financial and include prices of inputs, the sale of the product and cost of capital. Many variables are not just related to the plant; they are more related to the business case for the heat use and that is the key element that change from 2012 to 2018.

Senator Rose Conway-Walsh: Is that the cost to the promoter?

Ms Aoife MacEvilly: It is the economic test that is applied to whether the heat use is economically justifiable. We are very clear that the certificates are not enduring. For example, a full certificate could be reduced to a partial one at a later point. If a partial certificate is issued and a plant starts to use the heat in an alternative fashion and it can demonstrate that it meets the criteria for a full certificate that can change too. It is clear in the process that they can change. It is not like getting planning permission which is enduring in nature. Rather, it is something that can change over time and we are very clear about that in our process. Not only do we issue the certificate for the planned plant based on an application and data submitted, once the plant has been operational for 14 months we review a year of actual operational data and test it to ensure that it is consistent with what was submitted. If it is not consistent, we will change the certificate. We have done that in the past, not for a planned plant but for an existing plant. We made changes to the certification based on what we seen when we tested an audit.

Senator Rose Conway-Walsh: Why would anybody invest if they have to operate on moving sand? For somebody investing today there are no guarantees for a project.

Ms Aoife MacEvilly: If there is a valid business case and it holds true, then there is a clear justification for it and a lot of support is made available. We gave an example in the presentation of existing heat use by a milk drying facility. As long as the underlying business which requires the heat use remains in place, that justification should remain broadly as per the application. While that is not a guarantee it provides some certainty for the developer. There is no doubt that the planned plants are more complex.

Mr. John Melvin: All of these developers are taking risk. That is the business of developers and businesses. The function of the HE CHP certification scheme is to certify the quantity every year of electricity generated that meets this economic test. Someone could build a plant beside a milk plant and the milk plant might close. There is a risk that the user of the heat will close or will not use as much heat as had been anticipated. In those circumstances, we would have to determine how much heat was used and if there was an economic need for all of that heat.

Similarly, investors take a risk as to the cost of the fuel. The cost of the fuel could increase to such an extent that the end user no longer wishes to purchase that heat at that price. There is

risk. We certify every year to ensure that every year the element of electricity that is certified and is available for that higher price is meeting a true economic need. It can go up and down every year depending on the heat load of the end user and the economics of it. Significant incremental public moneys are available for HE CHP. It is our duty under the legislation to certify the quantities, which can go up and down. What is fixed through the refit scheme is the price for every kilowatt hour that is certified but the quantities that are certified can go up and down depending on market circumstances, the cost of fuel and the desire or throughput of the end user. Those risks still exist.

Senator Rose Conway-Walsh: Was that made clear to the promoter in the first instance and to all of the agencies involved, including Mayo County Council and the EPA? I do not understand why the agencies of the State are operating in a silo and there is no joint input in regard to the granting of permissions.

Dr. Paul McGowan: I will try to address that question. The test for high efficiency CHP is defined and set out in legislation. It is very much a defined function assigned to the CRU. The process by which we are guided is publicly available. A certificate, once awarded, is time limited. All of this is known to the developer. The processes which the EPA and others go through are separate to that of the CRU. The CRU process is narrow and defined. The purpose is to determine if a plant is a high efficiency CHP and does it achieve full certification of 100% or partial certification and at what percentage that should be set.

Senator Rose Conway-Walsh: I find it strange that the CRU operates in a silo in this area.

Dr. Paul McGowan: For this particular type of application we carry out our defined function. We do not need to engage with another agency to reach that decision. In regard to other functions that we carry out, be they the achievement of renewable targets, connection policies and so on, we engage with the SEAI, EPA and other agencies on policy development and decisions but on this narrow, technical assessment, there is no requirement for there to be any dialogue with other agencies. It is not that we refuse to do it; it is not required.

Senator Rose Conway-Walsh: Is this the first time this happened or has the CRU previously found itself in the situation of having to reduce a rating even though a promoter had invested €100 million and a plant was half built?

Dr. Paul McGowan: As my colleague mentioned earlier, certificates have been adjusted in the past based on the actual output data. I also pointed out earlier that of the planned plant certificates that have been issued the first one is due to come on stream in the near future.

Senator Rose Conway-Walsh: In regard to alternative applications, how long is that process? For example, will the promoter have to go through the entire process again or is there a fast-track mechanism for alternative applications?

Ms Karen Trant: On the process, we set out in our policy document that planned applications, which can be complex in nature, can take up to six months or longer. We have become pretty familiar with this particular application and the inputs for it. We treat all applications equally. It would be unfair we prioritised a particular application over another. However, as I said, we are familiar with this particular application and if Mayo Renewable Limited wants to submit another application, we will review it.

Senator Rose Conway-Walsh: It is very unfair to Mayo. There is deep shock in the community in Mayo. In north Mayo, where I live, there is a lot of deprivation and unemployment.

Regarding employment, there was an expectation from the community and the promoter. I ask that the CRU do all it can to make this project happen to fulfil those expectations in terms of employment.

Deputy Dara Calleary: In regard to fuel, the witnesses put significant emphasis on what they say is a change in a fuel. When were the concerns regarding fuel communicated to the promoters and how were they communicated? Did the CRU have discussions with the promoter on fuel inputs and what it defines as a change?

Ms Karen Trant: When we received the most recent application in 2018, as I have outlined, there were numerous communications with Mayo Renewable Limited. During June, July and August, we raised concerns over the inputs that had been submitted. It is fair to say that they would have been alerted about those issues at the beginning of the process in May through to August.

Deputy Dara Calleary: The judgment on fuel is the CRU's judgment as opposed to the promoter's judgment. Is that correct? The CRU's judgment is that it has changed. Did the promoter take a different view?

Ms Karen Trant: The promoters are of the view that their application is still the same. However, we pointed out-----

Deputy Dara Calleary: They are very strongly of that view and are backed up by internationally recognised consultants who were contracted. They have backed up the promoters' view. People in the field occupied by the CRU have expressed the view that the application has not changed. It is not just politicians who are saying that.

Ms Karen Trant: Our own advisers have categorically stated that the application has changed and that the inputs on the application have changed.

Mr. John Melvin: The business case in the 2018 application was to burn up to 70% of the finished product of the plant. That is the business case that was put forward and that was the right thing for the promoters to do. If that is the true and current business plan, it is right for them to tell us that is their plan. In September 2018, the draft recommendation was submitted to Mayo Renewable Limited. It asked for a copy of the draft recommendation and it received one. At that point in time, the promoters could see all of the calculations and all of the views of our advisers. They asked us to delay the decision-making process. At that point, if there were any material errors in our analysis, it was open to Mayo Renewable Limited to draw our attention to them. I do not think there is any debate or difference between ourselves and the applicants that in 2018 they asked to burn up to 70% of the high value product that comes out of the facility. There is no controversy about that but it leads to a very different business case. Mayo Renewable Limited, in giving the alternative, acknowledged that the cost of this product is high because it is of high quality. It proposed a high-efficiency dryer and demonstrated that, given this high-cost fuel, if the alternative was a high-efficiency dryer it would meet an economic test. However, the dryer uses approximately one third of the heat of the plant that is actually there. That is the big triggering difference between the decision made in 2018 and the one made in 2012. Mayo Renewable Limited was aware of all of this information in September 2018 at the latest because that is when it asked for and received a copy of our draft decision. There is no controversy between us as to the fact that in the 2018 application, the applicant was seeking to burn 70% of the valuable output of the whole plant. The whole enterprise is to make this valuable finished product and there is no controversy that in 2018, they sought to burn up to 70% of

it. That is a big change and that is the key differentiator.

Deputy Dara Calleary: I do not want to burst Mr. Melvin's bubble but I assure him that there is quite a lot of controversy on the fuel issue. If this decision was being made in France or any other EU member state, would it be different? Are our rules consistent with EU guidelines in this area? Is it possible that this would have achieved 100% certification in France?

Ms Karen Trant: My understanding is we have transposed the energy efficiency directive into national legislation. Our own policy is based on that. If there are differences, then they are differences with the directive.

Deputy Dara Calleary: Ms MacEvilly said that there have been changes to the assessment process since 2012. Did those changes happen subsequent to the 2012 decision relating to Mayo Renewable Limited or did the 2012 decision happen in the context of those changes?

Dr. Paul McGowan: The policy or the process that we have adopted has not changed. We issued some clarifications on foot of our learnings as we went along but I do not think we said that the process had changed.

Deputy Dara Calleary: The CRU's process has not changed and yet it came up with a very different decision on what, it is contended, was the same application. The process in 2012 kicked off €90 million worth of expenditure. That process has not changed and yet we have a completely different decision now.

Ms Aoife MacEvilly: The process is about taking data provided by the applicants, including financial data such as the price of inputs, the cost of capital and the cost at which they can sell the product and applying a formula to that data. The formula, which is legislation, has not changed. The process by which we translate their data into that formula has not changed. What has changed is the data that were input to that formula. The data that came through in the application in 2018 differed from the data that came through in 2012. I appreciate that if one stands back from it, Mayo Renewable Limited would say that the plant has not changed and it is quite right. It is still drying biomass. Looking at it from the outside, some of the key features have not changed. However, our process is around taking the applicants' data and applying the process to it and that data have changed. Our process is the same and the formula is fundamentally the same. I cannot be clearer-----

Deputy Dara Calleary: This is the core of why we are here. How do we resolve this to everyone's benefit? The CRU has a job to do but we have our job to do as well. The promoters contend that nothing has changed. They are disputing many of the issues around the fuel. How can this be resolved? What process is available in terms of further meetings or mediation between the CRU and the promoters to reach a resolution?

Ms Aoife MacEvilly: The promoters have sought a meeting with us and we have agreed to that. That meeting is scheduled for the coming weeks. If they have further evidence or a new application to put to us, we will consider that. If they have found a fatal flaw in our processing of their data, we will engage on that. That said, we have had a lot of engagement with them up to now and they have had the opportunity to look at the basis of our assessment in the context of the partial certificate. We will continue to engage with them openly and if they come up with a new proposed heat use that is credible and justifiable, we will look at that application again.

Deputy Lisa Chambers: Have the regulations changed at all since 2012?

Ms Aoife MacEvilly: No. The Irish and EU regulations have not changed.

Deputy Lisa Chambers: Does the CRU accept that the process it has employed and the arbitrary cut-off point of five years has a significant impact on prospective investors in the energy space? The risk is enormous. It has been pointed out that if one gets planning permission, one can extend it. There is more flexibility there for obvious reasons but the CRU is not bound by the same flexibility requirements. That is clearly a problem because €90 million has gone into this project thus far. We cannot just say, “Sorry, the time is up”. That cannot be the investment and regulatory environment in which these types of businesses are expected to operate. We are supposed to be moving towards cleaner energy. We want to encourage this type of investment but we have what appears to be an extremely hostile environment. I cannot understand it. Either the process was broken or it is broken now. We cannot sit back and just accept that this is the way it is. Have other member states transposed the directive in the same way as us? Do they have a five-year cut-off point whereby if there is some unforeseen bump in the road and a delay, the investment is lost? Is that the risk faced by prospective investors? If we are trying to encourage this type of business, this example will do much to discourage them. I would certainly think twice about it. We must find a way to get through this. The idea that changes in fuel composition which make the fuel slightly more expensive should cause the certificate to be reduced from 100% to 18% cannot be right. It seems wrong. There is an onus on the CRU, as a State entity, to provide investors and businesses with certainty. The process should yield a similar outcome at least given that pretty much all the key factors are the same. The only change - and this is disputed - has been the cost of the fuel, yet the certificate has been reduced from 100% to 18%. We cannot have a regulatory environment which allows that to happen.

What will be done to save this project and to restore confidence among prospective investors that this will not happen to them? If this is a real risk for prospective investors, they will not invest in Ireland which will be a problem for us beyond Mayo Renewable Limited.

Ms Aoife MacEvilly: The Deputy’s point about the investment climate is well made. We can certainly examine whether the five-year period is too long or too short. However, that does not change the fundamental fact that if Mayo Renewable Limited had proceeded to build the plant within the five-year period and the heat use had changed, the certificate could very easily have changed too. That is the requirement of the directive. We are looking at whether this is high efficiency CHP and it is a continuous assessment on an annual basis to ensure that only the correct amount is paid through the renewable support scheme. It is not terribly different from the position that applies to wind farm developers. Clearly, 100% of their output is renewable so the high-efficiency test is not necessary but their earnings will be based on how good a wind year it was. In all markets there are risks that have to be taken on board by the developer. Some of these can be managed, and HE CHP producers may be in a better position to manage their heat output than the wind industry. However, that is the nature of investment in different renewable sectors.

Mr. Melvin will explain the point regarding the difference between a full and a partial certificate.

Mr. John Melvin: The Deputy is correct that an enormous difference can be triggered by relatively small changes in the efficiency of the plant. As noted in our presentation, the threshold set out in the European legislation is that the overall efficiency of the plant must be greater than 80%. If, for example, the efficiency of a plant similar to that proposed by Mayo Renewable Limited declined from 80% to 79%, by virtue of the way the legislation is written, it would be determined that rather than 100% of the electricity being HE CHP, as is the case once the

80% threshold has been met, approximately 50% of the plant's electricity would be HE CHP because the 79% efficiency rate falls below the threshold. The legislation is written in such a way that if the efficiency target is exceeded, the percentage of HP CHP electricity produced in the plant will be set at 100%, whereas if it trips just below the efficiency target, a different set of calculations comes into play. In the case of a plant such as Mayo Renewable Limited, by virtue of the legislation and the formula it provides, the maximum percentage of HE CHP electricity thereafter would be between 50% and 53%.

On the risk that the entity making the investment makes, our decision is very clear that where the plants are not yet installed or operational, a planned plant certificate in no way guarantees future evaluations will result in continued certification. That is made very clear in our 2012 decision. The reason is that we are obliged under legislation to examine annually how much of the electricity in a site warrants the HE CHP certification. That will vary from year to year. If the efficiency drops below 80% at any point, the amount of HE CHP electricity drops by virtue of the formula in the European legislation.

Senator Michelle Mulherin: We rely on the private sector because that is how we have progressed our energy market. We have private generators and we do not want to have a dominant supplier, as was the case with the ESB. We have moved away from that in the retail and wholesale markets and apparently that is progress. However, as has been stated, some degree of certainty is needed if we are to attract private investors. Investment will always involve an element of speculation but there is a point at which people are turned off and they will then move and invest elsewhere. This occurred in wind generation when transmission issues arose.

We have consultants of international standing retained on this matter and there has been engagement with the CRU. Aside from the complexity described by the CRU and the methodology it must apply, this process appears to be something of a mystery and companies must take a punt. My experience is largely with the planning process. Under the local authority planning process, pre-planning gives a developer a clear indication of the way in which legislation or regulations will be interpreted to enable the applicant to tailor an application accordingly. I am confident that the people the CRU is dealing with are intelligent enough to modify their proposal if generating electricity using 70% of what they have dried is not considered efficient use. That the previous proposal to transport wood thinnings across the Atlantic is considered a more viable prospect sounds mad to the general public, me and possibly other members.

Documentation issued by the CRU does not provide conditions or reasons for refusal, as is done by An Bord Pleanála and other bodies. It does not indicate that the proposal to use 70% of the dried matter to generate electricity is not efficient under the economic justification grounds. There is nothing like that. There is a serious problem here. None of us needs to have a technical background. We can try to appreciate what the CRU is doing but we will never step into its shoes. This process is much too obscure to be healthy or democratic. We are asking people to invest to create jobs and economic benefits locally, as described, and to help us reach our renewable targets. We have heard many complaints from people who have not received feedback. The decision made has surprised everyone. This meeting has shed some light on the situation but I do not consider it satisfactory. What the CRU has done leaves an awful lot to be desired. It would be fine if we were discussing a project that had not been half built already. The CRU has basically said it has been on a learning curve in the past few years. That is not acceptable. I am annoyed and outraged that these people have gone through this. It took them long enough to get the certificate in 2012. It was not a knee-jerk reaction. The the Commission for Energy Regulation, the previous iteration of the CRU, told them it would have to be biomass at a time

when peat could not be burned because plants were to be co-fired with peat and biomass. Surely the CRU could have communicated with them to tell them the proposal was never going to go anywhere. We have enough problems with our planning systems but what if local authorities or An Bord Pleanála operated like that? There is a provision for An Bord Pleanála to tic-tac on strategic planning applications because one has to tease out issues. I saw the document the CRU issued and it did not give reasons. If something is not 100%, it is not commercial viable. It is not academic for them and it is crazy.

Mr. Melvin spoke of the economic justification. We heard the case for a renewable heat incentive scheme, which we do not have. Is he saying that if there was an end market for wood-chip, a district heating system or something else and that this would be more economically justifiable than recycling it and burning it in a plant to generate electricity, it would be acceptable? If Killala wanted a district heating system in the morning, is he saying it would be able to have one? If the CRU's interpretation was made plain in that way, people would understand it. The CRU accepted that another European Union country could interpret the directive differently but it does not give our people any benefit of the doubt. The CRU is on quicksand in relation to this. It is not at the cut and thrust of the industry, as are the people to whom I am referring.

The mystery around the engagement in this case is a hallmark of the case. We do not want to be dragged into this but it has been going for a full year. The CRU has had two sets of consultants, the first of which carried out due process for the bank, which justified the proposal in its entirety. My understanding is that this is the reason the consultant went. Are there not enough resources for the CRU to do the assessments itself? Why are assessments being handed out to consultants? It is very unsatisfactory.

What is the CRU going to do for these people? If it is now telling them to do X, Y and Z and to import the material from the United States, why did it not tell them to do so in the middle of the process? If it is acceptable now, with a bit of hocus-pocus, why was it not acceptable back then? Is it all such a mystery that no one can invest? Are we going to have no further CHP plans like this? I am baffled by it all.

This is a serious issue but I think the CRU is getting the message. We have skin in the game but there is a national issue in the form of heat and electricity. It will cost more for input material but we are also going to be fined. That makes no sense.

Dr. Paul McGowan: The CRU takes its statutory functions very seriously. We have a very defined legislative role to fulfil relating to the high-efficiency CHP. Outside of that, we work to ensure that Ireland can meet its renewable targets. The certification of high efficiency requires a very narrow analysis based on the submission from the developer. We cannot advise the developer what to put in its application because the economic case has to come from the developer.

We shared our results with the developer in September last year. At the developer's request, the team decided to hold off on a decision to allow it to make further submissions. We have agreed to meet the developer to discuss the outcome and it is open to the developer to make a further application. Other applications are ongoing but we are familiar with the developer and the plant and we would look to progress any future application in the shortest possible time.

On the change of consultants, I reiterate what my colleague said. The consultant was out of contract and there was no other reason the consultant was changed on this application. We could not, under procurement rules, use that consultant any further.

Senator Michelle Mulherin: Is Dr. McGowan aware that the consultant had worked with the bank on due diligence?

Dr. Paul McGowan: I am not. I have no knowledge whatsoever of what the Senator has just said. We have new technical consultants under contract, who carried out the assessment and came up with the same view as the previous consultant. It was on that basis that the ultimate decision was made.

We use consultants because we have had, to date, 113 high-efficiency CHP applications from all sources. It would not be a sound resourcing decision to keep the range of engineering expertise we would need in-house to be able to assess such a diversity of technologies. We have a team that works on the applications but the engineering expertise is provided by external experts.

Ms Aoife MacEvilly: We are fully aware of the concerns expressed by Deputies and Senators today. We have heard real concerns over the local impact and it was a very difficult decision to take for the commission, even though the advice is clear and the process is very black and white. We knew the impact the decision could have locally. We have to come here to give technical, financial and engineering explanations but this is the nature of the role we have been given. We are doing it to the best of our ability because the public interest is key. I hear the suggestion that there is no openness in the process and we considered this point when we looked at this case. We provided a response to the applicant relating to the certification, detailing the rationale for the partial certificate. I appreciate that somebody who is not immersed in the technicalities and the legal basis of this might not find it clear but we hope it provided some clarity to the applicant.

In the course of this process, we have considered whether we should or could publish more on the applications we receive, as the EPA does. Our initial concern was that the financial information would be commercially sensitive and that there might also be competition issues but there may be a way of redacting the information and if the committee is giving us feedback to the effect that we should have more openness and transparency around the process, we could certainly take it on board. We want to improve on that aspect if we can.

Ms Karen Trant: The original consultants raised the point about conflict themselves, having worked with Mayo Renewable Limited.

Senator Michelle Mulherin: Then the CRU did know.

Ms Karen Trant: We contacted Mayo and then used Mott MacDonald, which is based in the UK, rather than the Irish firm. Mayo Renewable Limited was fine with that and agreed to it.

Dr. Paul McGowan: To clarify, I was not personally aware of that.

Ms Karen Trant: Not to that level of detail.

Dr. Paul McGowan: My colleague subsequently clarified other knowledge.

Mr. John Melvin: Regarding additional heat loads, some CHP facilities that we examine can have a cluster of customers and a number of different uses. Some of the applicants can locate themselves close to an existing user and be part of the development of a new user. It is available to developers to do all of the things the Senator mentioned. If industry is located adjacent to the facility that has a use for additional heat, that can increase the efficiency of and

economic justification for the facility, be that district heating or co-location with other users. All that a developer could do to increase the efficient and economic utilisation of the heat would be taken into account in the annual certifications as it got new customers, increased the use of the heat nearby or found new users adjacent to it. Some facilities have three or four different uses and two or three different customers in their mix. That is an option for Mayo Renewable Limited or any of the HE CHPs. This is entirely what the energy efficiency directive is about. It is to incentivise this approach, hence the higher payment for HE CHP, and create a mechanism whereby the public moneys involved go towards where there is an economic justification and the new equipment is more efficient than it otherwise would be. All we do in this regard is undertake the role we have been given in legislation to apply the legislation and that test so that the incentive is efficiently applied and goes to where it brings correct benefits.

Senator Michelle Mulherin: I had asked about the renewable heat incentive scheme, which is proposed but has not come into being. If that created more demand for heat from a facility like this one, is Mr. Melvin saying that the State would subsidise not only that, but also the generation? Is that how it will work out? If there is suddenly an increase in the market for woodchips and a facility does not use its 70% by burning it but by selling it into the market, is that the sort of consideration that Mr. Melvin has in mind?

Mr. John Melvin: If Mayo Renewable Limited can bind a business case for that and there is an economic justification for that approach, that is exactly what we will evaluate. If the demand for this product took off and Mayo Renewable Limited found a way to use less of its own throughput and sold more of it elsewhere, that would clearly improve the economics of the business. Applying the legislation, as guided by Europe, we would calculate the useful heat. In that scenario, the useful heat figure would increase. The HE CHP's figure could also increase. If the overall efficiency rate went above 80% for this type of plant, it would automatically get 100%. If it was slightly below 80%, it would go somewhere slightly lower than 53%. All of this is done through the application of the formulae in the legislation.

Senator Michelle Mulherin: I thank Mr. Melvin.

Senator Paddy Burke: I welcome the commissioners and the regulator's staff. Mr. Melvin is saying that if a facility, instead of burning the 70% itself, brought it up the road to the likes of Coca-Cola and the latter was able to adapt its premises to burn the pellets for the purpose of generating heat or electricity for its plant, the facility could qualify for 100%.

Ms Aoife MacEvilly: We are straying into speculation on what would make a successful application. That is difficult for us, as we cannot advise on what is an appropriate business case. Rather, we are saying that if Mayo Renewable Limited can find alternative uses for the heat and show us the economic justification, we will assess that.

Senator Paddy Burke: We are just trying to tease this out. It is ridiculous to think that a facility could bring the woodchips up the road and use it in a different plant but that if it burned them in its own plant to generate electricity, its case would fail. It would be much more efficient to burn the woodchips on the facility's own premises than to haul it 10 miles or 20 miles away. That would make no sense, but it is what the witnesses are saying.

Ms Aoife MacEvilly: What we are saying is that, based on the application we receive, Mayo Renewable Limited was only able to demonstrate that the efficient heat use was worth a partial certificate. The cost of the fuel makes the processes that it is proposing quite expensive. It is an expensive way to dry woodchips. That is what we have to keep in mind. Compared with

an alternative process for drying woodchips, for example, a high-efficiency boiler, what Mayo Renewable Limited is proposing is only about one third as efficient. That is the core problem. If one has a low cost of fuel and a low-cost energy, one can effectively afford to have a less efficient process and still meet the economic test. The problem is the cost at which the facility operates and the efficiency of the process that the company has proposed.

Senator Paddy Burke: The first application was in 2012. Has the efficiency of the boilers in the second application changed since then or is it the same?

Mr. John Melvin: It was broadly the same plant from when the 2012 certificate was issued to the 2018 certificate. What has changed is the business case that the developer submitted. The business case in 2012 stacked up because there was a low cost of fuel. With the low-efficiency dryer that the developer installed, it made economic sense. In its 2018 business case, the developer acknowledged that the facility would burn an expensive fuel that was its own product. While we agreed that burning this expensive fuel in a high-efficiency dryer made economic sense, the justification the developer gave only used approximately one third of the energy of the actual plant. This was the case that Mayo Renewable Limited put to us and that we evaluated. We can only evaluate the cases put to us. Hence Ms MacEvilly's suggestion that we do not speculate on alternative cases. We will evaluate any case that is put to us. This element was a major difference between the 2012 and 2018 cases. We communicated that to Mayo Renewable Limited when it asked to see our report. It was, therefore, aware of the difference. It was for Mayo Renewable Limited to propose a different business case if one was tenable for it at the time.

Senator Paddy Burke: Is the same tariff paid to all windmills or is there a different one? The efficiency of some windmills differs from others.

Dr. Paul McGowan: The current REFIT scheme differs according to the technology. It is usually based on output rather than capability. While a wind turbine might have a 5 MW capacity, it will only be paid a REFIT payment based on the megawatt hours that it produces. The subsidy provided to onshore wind is approximately €70 per megawatt hour. I will confirm that in writing, but it is of that order. The subsidy that is paid to HE CHP per megawatt hour is in excess of €100. There is a considerable difference in the rates that can be paid for different technologies under the current REFIT scheme. That scheme is now changing and will become the renewable energy support scheme, RESS.

Senator Paddy Burke: But one does not know how efficient turbines will be. The wind might not blow.

Dr. Paul McGowan: As part of its business case, the developer will determine-----

Senator Paddy Burke: The CRU is responsible for the tariff. In the case of this project, we know that the fires are going to burn all day and all night. In the case of windmills, however, we do not know if the wind will blow but the CRU has no problem paying the full tariff.

Dr. Paul McGowan: To be clear, the renewable energy support scheme - the current REFIT scheme - is a Government scheme and, as a result, the CRU does not determine the rates that apply. In the case of a power generation facility that is burning biomass in order to produce electricity, for example, the Senator is correct that it may well be able to run on 24 hours a day, seven days a week but it may also be subject to downtime for maintenance and on foot of unexpected outages. There are risks associated with the operation of such a plant, even though it

might seem to be very predictable. One can never assume that such a plant will achieve 100%. In the case of a wind project, as far as I am aware, wind developers carry out an awful lot of analysis at their sites to determine the expected average wind yield and what they can expect in terms of output. They can work out their economics based on that analysis. We are talking about two very different types of analysis but both include risks to the developer.

Senator Paddy Burke: What can be done to resurrect what is a very important item of infrastructure for the country? It is not just important for Mayo but for the entire country. It is one of the first HE CHP plants to be planned but many more could come on stream in the future if it is successful and if investors can be found for similar schemes. However, potential investors would run a mile from such a scheme based on what we have heard today. Investors would have no confidence in the system given that an application for this project was submitted in 2012 and that those involved were facing bankruptcy by 2018.

Dr. Paul McGowan: I will not repeat the responses given by my colleagues earlier except to state that we have arranged to meet the developers to discuss the circumstances relating to their application and the issue of the partial certificate. It is open to the developers to make an alternative submission with a revised case for the plant. We cannot tell the developers what they should do because that is a business decision for them but we will assess any new application.

Senator Paddy Burke: Can we take it that any new application would be assessed as a matter of priority?

Dr. Paul McGowan: As stated earlier, we have a familiarity with this plant. While it is fair to state that our normal timeline for a plant of that complexity could be six months or more, in the circumstances and given what we know already, we would certainly try to address it as quickly as possible.

Acting Chairman (Senator Tim Lombard): Senator Conway-Walsh is next.

Senator Rose Conway-Walsh: My questions have already been answered. I am sure the CRU is now very aware of the seriousness of this project and how much it means to the local economy.

Deputy Dara Calleary: I have a couple of quick questions, if I may. Have any partially built plants been completed?

Dr. Paul McGowan: My advice is that none have been completed but one is nearing completion.

Deputy Dara Calleary: How far from completion is the plant?

Dr. Paul McGowan: A few months. I would expect it to be issued-----

Deputy Dara Calleary: The developers or promoters have engaged renowned international consultants whose view on this is completely different to that of the CRU. Has the CRU compared and contrasted its views with those of the aforementioned consultants? Would the CRU be able to provide its opinion on the views of these consultants so that the promoter can see where the differences lie and try to address them?

Dr. Paul McGowan: As stated previously, the report that was prepared by the first group of consultants was shared with the developer. The report that has been produced by our second set of consultants concurs with the determination made by the first set of consultants. When we

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meet the developers, we will share as much of that information as we can in the context of their application and the consultants' determinations on it. They have seen the consultant's report that was produced. We gave it to them in September.

Deputy Dara Calleary: I ask that the CRU correspond with this committee following its meeting with the developers. We have spent over two hours here today but I believe the committee will need to assess this matter again.

Acting Chairman (Senator Tim Lombard): On behalf of the committee, I thank our guests from the CRU for attending. This has been a very worthwhile engagement.

The joint committee adjourned at 7.15 p.m. until 3 p.m. on Tuesday, 16 April 2019.