

16 Tyr-y-Sarn Road
Rumney
Cardiff
CF3 3BD

11.11.2020

Dear Sir/Madam

Planning Application Mor Hafren (Co-Gen) CF3 Incinerator

I am writing to submit my strong objections to building an incinerator in the east of Cardiff. The objections are as follows:-

Government Waste & Recycling Policies

1. The Governments Resource and Waste Strategy (RWS)5 published in December 2018 set out that the adoption of the recycling rates enshrined in the adopted EU circular economy package meant clearly that there was no need for additional incineration capacity nationally. Government has introduced the prospect of an incineration tax to prevent provision of such capacity locking in otherwise recyclable waste or drawing non-recyclable waste from so far afield that the transport impacts are unacceptable. In effect such a tax would be seeking to internalise impacts of incineration that are currently externalised. Currently the adverse effects from carbon emissions are spread across the public realm without the producer taking responsibility for it. This is contrary to the "Polluter pays" principle that forms the cornerstone of UK environmental policy. It is this particular concern that the very recent report of the standing committee on climate change has flagged as urgent in need to address, before any further incineration capacity is consented to in the UK.
2. The release of the National Resources and Waste Strategy progress report August 2020 for England includes an assessment of progress in reducing avoidable residual waste which the National Resources and Waste Strategy commits to eliminating all avoidable waste by 2050. This found that **"a substantial quantity of material appears to be going in the residual waste stream, where it could have been at least recycled or dealt with higher up the waste hierarchy."** Additionally the more recent **"Circular Economy Package Policy statement"** of The Welsh Assembly Government stated **"In December 2019 The Welsh Government consulted on a new circular economy strategy for Wales - Beyond Recycling"** It proposed the next steps in the pathway towards a circular economy in Wales through strategic aims to become zero waste, Net zero emissions nation. That uses a fair share of the earth's resources whilst realising the economic potential this transition brings. The Welsh government also identifies the circular economy as a key part of its economic action plan and its natural resources policy. Resource efficiency is also a key component of the legislative framework in Wales included in the **"Prosperous Wales"** goal under the Well-being of future generations(Wales)act 2015.
3. Considering the proximity of the current Viridor facility and the Aviva Incinerator in Barry and this proposal and an even further one all within a 20 miles radius. The applicants proposal that it will provide a much needed facility to support the UK government waste hierarchy is both false and ludicrous.
4. At this stage it would and should be incumbent both on the NRW/Planning authority and the Welsh Assembly Government to consider a further threat to the public purse and the environment by this application and any further applications. I would submit the following extract from a government source that includes the input of the Bank of England. It is on the subject of **"Stranded Assets"**

Power sector asset stranding effects of climate policies

Jasper Rigter, Ben Caldecott, Nicholas Wagner & Dolf Gielen Pages 99-124 | Published online: 31 May 2019

ABSTRACT

Energy sector decarbonisation to limit the temperature rise to well-below 2°C will result in stranded assets and capital stock replacement before its technical lifetime ends. In this paper, stranded assets in the global power sector are quantified based on a simplified bottom-up analysis that considers the capital stock turnover of fossil fuel-fired power plants in the G20 countries between 2015 and 2050. Power sector transformation starting now based on accelerated deployment of renewables results in US dollar (USD) 927 billion of global power sector stranded assets by 2050. Stranded coal assets would represent around three-quarters of total stranded assets value and China alone would represent 45% of the total. Delaying action to mitigate climate change until 2030 doubles stranded asset value. Countries should consider assets' age profile characteristics in their decision making. Early action and avoidance of investments in new carbon-intensive assets can minimize stranded asset risks.

Acknowledgments *The working paper that is background to this paper has benefited significantly from expert input provided by Jakob Thomae and Christopher Weber (2° Investing Initiative), Julia van Huizen, Carsten Jung, Matthew Scott (Bank of England), Jeremy McDaniels (United Nations Environment Programme Inquiry into the Design of a Sustainable Finance System), Harald Hecking and Theresa Wildgrube (ewi Energy Research & Scenarios), Marius Backhaus, Martha Ekkert and Martin Schöpe (Federal Ministry for Economic Affairs and Energy of Germany), Laura Cozzi and Timur Gül (International Energy Agency). We are also grateful to the three anonymous reviewers for their useful comments. The authors declare that there is no conflict of interest regarding the publication of this article*

What this potentially means to the Welsh Economy and the Welsh Assembly Government is that if the fad for waste incinerators continues and a stop is not put to them immediately horrific air pollution will be the result.. In the timescales the UK government has set of creating the circular economy by 2030 it means the life of these assets are short lived. The likelihood is that the owners and developers will abandon these assets and walk away utilising whatever legal methods they can to do so. Therefore the liability of these assets for their clean-up and removal will be left with the Welsh Government. It cost around £200M+ to build an incinerator but this is likely to be more per incinerator to clean-up and scrap. It is proposed that some 25 incinerators are to be built in Wales so a conservative figure per incinerator clean-up of £200M each would mean a bill for the Welsh Taxpayer of £5Bn. This is madness and therefore in the long term interest of the taxpayer an immediate halt must be put on these archaic facilities.

It is interesting to consider that the alternative new technologies to incineration that would provide 100% clean recyclates and new collecting methodologies which would be practically net zero carbon would cost a fraction of the cost of an incinerator with no danger of becoming outdated and a real asset to the circular economies.

The Company (Mor Hafren)

- 1 This company is not a real company, it is just one in a number of ghost companies set up to obtain planning permission for this type of facility, based on the assumption that if successful they will gain energy grants from the Government. I understand that this may not be a strong consideration as they are only seeking planning for the land. Whether they actually utilise it for the purpose they state is another matter. But I strongly believe that the credibility of a company is and should be considered for such a development that will have huge impacts upon the city and surrounding regions. You do not want to give planning consent to someone who claims to want to do one thing and then decides to change it to something totally different.
- 2 This company on searching has only two personnel which includes the main director and has never operated any facilities of this type.
- 3 This type of speculative company has sprung up from the mistaken view that so called "energy from waste" is the next big financial market killing.
- 4 This company has registered 82 similar companies for this purpose all over the UK. Of these over 25 have either failed leaving the investors in a bad loss making situation or been refused planning permission or just scrapped through lack of investors. This is easily checked out online as I have done and the facts of the matter are there in black and white. Due diligence again should be a strong criteria for consideration. However I am happy to provide you with a list of these as I realise it is not your job to look at this, but may be useful in your considerations.
- 5 Mor Hafren will probably not be putting much of their own money into it, but instead use a system of investors who will see profits from glossy brochures.

- 6 They were pressured to hold community consultation, but the standard and quality of this was very poor with much of the population of east Cardiff totally unaware of the proposal.
- 7 On several occasions the registered owner of this speculative company was requested to attend and face the general public, but refused to do so. Sadly this is often the case. Clearly the response despite the company's efforts to suppress knowledge of its application and the superb work of the community of "Stop the Burner" campaign, Residents Against the CF3 Incinerator, which includes the sitting MP, and many local councillors clearly demonstrated superior numbers of objections to their "Health" being used to fuel the profits of some rich businessman.
- 8 This is the same company that the residents of Merthyr Tydfil saw off a couple of years ago when they wanted to build this incinerator there. It was wholeheartedly rejected.

The Source

- 1 Mor Hafren state that they have a contract with a company to take the waste that they will burn in this facility. But they refuse to name the customer and more alarmingly the type and nature of the waste streams. In view of the fact that Mor Hafren seem to not want to disclose the makeup of the waste streams, due diligence and caution again needs to be exercised and the "Worst case Scenario" considered. The authorities should demand full disclosure as it would be impossible to assess Traffic volumes and flows and many environmental criteria that could be detrimental to the local environment and economy.
- 2 They have I believe substantially altered from their original application to state that the waste will be RDF (Made of of what is a matter of urgency to determine) I tonne of RDF will require typically 1.33 tonnes of raw waste. This will be waste that should be going into the circular economy through recycling.
- 3 This will mean an increase in capacity of incineration of waste material that should go to recycling but also a huge increase in traffic volumes as these loads will have to be substantial to make the facility pay.
- 4 This all fly's in the face of UK government strategy on increased recycling and less carbon emissions.
- 5 Mor Hafren has not demonstrated a need for the proposed extra capacity. Particularly when they have to compete with the adjacent Viridor incinerator and the possible Aviva Incinerator and the new application for a Tremorfa incinerator all jostling in a very close proximity. And just a few miles down the road in Newport yet more incinerators.
- 6 UK and Welsh government environmental policy is clearly going in the direction of Zero Carbon emissions. And if this application is successful then this will be counter to the government policy as Mor Hafren and indeed the others are clearly NOT Net Zero Carbon.
- 7 Moreover Mor Hafren application will have no Carbon capture facility and in this they will be in line with all the other UK incinerators that promise to be Net zero carbon but none have any carbon capture systems. Again this flies in the face of agreed environmental policy of UK government and indeed EU. On this point alone the inspectors can quantifiably reject the application as unsuitable for the agreed waste management and environmental policy of the UK & Welsh Government.

The Incinerator

- 1 There is absolutely nothing special about the proposed incinerator, indeed very few of them differ, apart from the labelling of "Gasification" which to anyone with any experience will tell you is a term used to lure unsuspecting investors into supporting a dirty technology by fooling them into thinking there is no dangerous stack emissions. This term refers to the methods utilised to try to reduce the levels of toxic emissions which will always flow from the stack of an incinerator especially at low burn temperatures.
- 2 Temperature burns that are as low as 800 degrees produce far more levels of toxins than that of a temperature burn of 1,800-2,000 degrees, which in my experience is the minimum level all incinerators should be made to burn. Accompanying this all incinerators should immediately be fitted with carbon capture equipment at the top stack to ensure no emission to the atmosphere.

- 3 All incinerators emit various levels of toxic emissions. They always include, dioxins, furans, PM2.5, and PM10. PM2.5 is highly dangerous as are the rest to organic life forms and have been found in new born infants.
- 4 The facility in terms of size is humongous and sticks out like a sore thumb in the landscape. The proposers have failed to clarify technical questions from those opposed. Stack height has been altered a number of times. And the garish colour scheme is not conducive to the cultural heritage of the area.
- 5 All incinerators suffer from "Cold Spots" on burns. This is an area of clumped waste that resists the burn temperatures trying to be obtained and effectively reducing the temperature of burn and the waste subsequently not being incinerated.
- 6 The makeup of the source material is and should be of great interest, as a high level of materials currently going into incinerators is utterly unsuitable and dangerous. For example, there is absolutely no calorific value in burning glass, cardboard or complex materials with a chemical mix including "long chain organics". In fact burning such materials is not only damaging to the local environment but also the facility itself, which in turn will lead to much downtime and costs.
- 7 Serious questions as to the makeup of the source material as feedstock need to be asked and the proposers need to provide full technical specifications to this and why they think it is suitable to burn.
- 8 The storage of feedstock is also one that needs to be clearly detailed. Is it toxic in the first place, solid, liquid etc. Will it be in banded compounds? Will it be closed off from the elements? What fire safety systems will be in place for the facility and feedstock area.
- 9 The levels of transportation into the site. Is it by rail or truck, if so how many trucks, how often, what sizes and loads, and distances covered to arrive at the site. This is fundamental to the levels of carbon emissions.
- 10 Questions need to be asked about possible flooding of the site as it will sit within the floodplains and if this were to happen where would the drain off go and how compromised by the waste would it be.
- 11 Incinerators are not quiet facilities they make a lot of noise and this will be easily carried along the flat plains to all the suburban dwellings which will be far too close to the facility anyway. It is bad enough with the current industrialisation of the levels. What proposals are there to ensure that a zero noise element for the nearby population is planned.
- 12 This application appears to be a bare minimum application with absolutely no commitment to the waste heat derived from the burns and an assumption on their part that they will automatically be given R1 status. Maybe they intend putting a tap on the side of the facility for anyone who wants to fill up a bucket of hot water.
- 13 It is worth noting at this point that this is the same empty promise was made by Viridor with their application and as yet absolutely no energy has been used to heat anything as the infrastructure to do this is non existent and far too expensive for the value of the end product. No cost benefit. Indeed this fact has been established by the current sitting MP of Cardiff South and Penarth in a commons debate recently on this issue, in which he states clearly that the WAG and Cardiff council are disappointed at this fact.
- 14 The stack will immediately pour toxins over the SSSI that it would be situated upon. Along with wind spread onto nearby schools aided by the windmill also situated within a quarter of a mile radius.
- 15 Where will all the toxic fly ash go. Is it to be treated on site or will this lead to yet again further transport logistics being involved and dangers to the environment.

The Environment

- 1 Climate change impacts should be part of any environmental impact assessment/statements. I would argue that the claimed benefits are exaggerated and the climate harm is clearly being downplayed by the applicant. Therefore the inspectors should and could easily refuse the application on the grounds that the HARM outweighs the benefits.
- 2 Release of greenhouse gasses and prejudice against meeting any UK & Welsh Government ambitions to tackle climate change must be considered as a material planning consideration that weighs against the application.

- 3 If you were planning on building this outdated toxic type of facility anywhere I think common sense would suggest that you do not locate it on the grounds of an SSSI. The Wentlooge Levels are a unique and precious facility developed over thousands of years and is one of only five within Europe. It is unique for its flora and insects and other species only found within this area. This alone should qualify it to refusal of the application.
- 4 The application has absolutely no mention of climate change impact and I have yet to see any viable "Environmental Impact Assessment" from them.
- 5 In 2017 the UK was operating 42 incinerators (an increase of 37 in the last 30 years). With more being planned in the new "Gold rush" for energy sources this has already led to a massive over capacity of incinerators within the UK. The Blair government called for another 177, with very little concern for the environment. Very few of these incinerators have actually been connected to district heating and the siting of this particular one is peculiar.
- 6 These 42 incinerators combined have produced nearly 11 million tonnes of CO², around 5 million tonnes of which were from fossil fuel sources such as plastic resulting in an unpaid cost to society of around £325M if the BEIS carbon price were applied. Should this continue over the next 30 years the total cost to society of fossil CO² released from these incinerators would equate to more than £25Bn of actual harm to the environment from the release of around 205 million tonnes of fossil CO² Adding more incinerators is not progressive. Surely if we are to heat our homes and businesses and increase real recycling in the circular economy we must uptake the far superior technology that currently exists and new methods of waste management to ensure a green and clean future for our future generations.
- 7 I would suggest that to lock businesses and domestic dwellings into any incinerator based heating supply system is misguided and utterly dependent upon the ability of the facility to perform.
- 8 Legislators need to include the looming carbon intensity and climate change into any strategic decisions on utilising so called energy from waste incinerators. I appreciate that current planning regulations and laws have not kept pace with the environmental reality of these types of dangerous facilities, so it is to good old common sense of elected members and an open ear to the thousands of local residents who have strongly opposed them. Appeals and judicial reviews are in the pipeline which will fundamentally alter the future viewpoints of these dinosaur facilities.
- 9 The EU is now contributing 87 million tons per annum of toxins from biomass burning which includes incinerators. This does not include other forms of stack emissions (in Wales M4 corridor Newport-Swansea has 500+). The addition of yet more (25 planned for Wales) and it is no wonder that Wales is now the highest polluter in the UK. (Source BBC)
- 10 When I started my career in Waste Management in the early eighties concerns about the environment were being echoed by scientists worldwide. Since the Industrial Revolution 1850-1950 air pollution and global damage to the eco system has increased by a factor of 150. A single CO² molecule can remain in the atmosphere for over 100 years. Carbon increases from waste incinerators in the UK at the current rate not including applications accounts for 32% of the total emissions.
- 11 2017 marked a turning point in the planets biosphere at 418ppm CO², in 1850 it was under 200ppm. and 1960 saw it at 315ppm. At the current rate we will hit 500ppm in no time. In 1950 emissions were 5 billion tonnes, and despite all the worlds fancy environmental summits it is now 35 billion tonnes per annum. The last time it was this high was 3 million years ago before human existence. For organic life 350ppm per annum is our basic survival rate. The general talk from many nations is the serious reduction of sources and these would include all incinerators of waste.

Health

- 1 There is absolutely no world scientific evidence to prove that incinerators do not affect health. Every Government study that has ever been undertaken has stated clearly that an element of toxins harmful to health will emit from the stack. The problem is that the legislation seems to ask only about individual emissions, but this is situated in an area of the M4 corridor from Chepstow to Swansea that has well over 400 other emission facilities that together create a "Toxic Accumulative Trickle" that is seriously damaging the air quality of South Wales. Add to this the drift of emissions from across the water in the Avonmouth/Bristol regions.

- 2 Within less than a 20 mile corridor we have the Viridor waste incinerator and the Aviva Insurance Company Barry facility.
- 3 Cardiff is currently the “Asthma” capital of the UK according to medical professionals and a recent study has shown that Wales has the worst air pollution in the UK with Newport and Cardiff being the most toxic.
- 4 World studies have shown that within a 20 mile radius of all waste incinerator facilities the increase in still births and deformities in babies is striking. It will be well remembered that when the toxic Incinerator of Rechem at Pontypool was operating a nearby Duck Egg farm was producing highly toxic eggs without their shells. When you burn any material you emit toxins and they don't stay in the clouds, they combine and settle on all surfaces, city dwellings and agricultural land. The latter is taken up in the rootstock of plants which in turn is eaten by cattle etc., and then into the human food chain.
- 5 A startling fact was presented just recently on the BBC's Gardeners World by a leading ornithologist who stated that studies have shown an alarming drop in insect life worldwide because of toxic air poisoning. Indeed, it is so bad that nearly 75% of winged insects have disappeared. All these accumulative effects, so some rich businessman can earn more money for himself. Me and my family's health is not for sale and neither should yours or anyone else's.
- 6 Huge increases in air pollution from facilities such as these will also have a knock on effect on the NHS with respiratory diseases and other related health issues. This will put huge strains upon the resources of the NHS which will create further demands on funds needed.
- 7 In the 1918 Spanish Flu Pandemic detailed studies later revealed that in areas of high industrial pollution the pandemic was far worse, due to very poor respiratory disease already in the population. Covid19 is a dangerous respiratory disease and these facilities and their outcomes will provide a platform for further dangers to all human health.

The Circular Economy

- 1 The planet has only so much resources available and too often we humans have relied upon science to find a way forward when we have issues with raw materials. The current world population is creating a demand on the worlds resources that beggars belief, we are literally draining the planet dry of vital materials, but worse is the wasting of valuable resources that we class as waste, when it could be re-utilised again and again.
- 2 It is a proven fact that modern economies are realising the advent of these bogus energy incinerators are having a major damaging effect upon the recycling levels that all Governments have realised we need to achieve.
- 3 I have long campaigned for a circular economy and strongly believe that it is far more lucrative to humans than burning or burying valuable resources that could save us and the planet. During my career in waste management I achieved remarkable achievements in recycling both in the public sector with Cardiff Council but more so with my clients when I worked in the private sector. I could give you hundreds of examples, that not only led to good practice in waste management but saved the companies huge amounts of money on the bottom line equivalent to some 2% per company.
- 4 The UK Composites market is currently worth around £2½bn and is set to rise to £12bn p.a. and create thousands of jobs, most of these from utilising waste products and preventing them from being burned or buried. If you want to create real long term and rewarding jobs then it is the circular economy you need to focus upon.
- 5 The current problem of spoilt recyclates is largely a matter of the incorrect systems being used to collect, and understandably customers for recyclates want it to be clean and sterile. This could have been achieved back in 2007 by new technology and collection methods and at a fraction of the current cost of waste incinerators.
- 6 Consideration needs to be given to plans for Zero Waste in Wales being considered in government and a possible short term planning forced upon them. Plus a strong clause to not permit a range of determined materials not to be incinerated.
- 7 Consideration must be given a high priority to the “**Circular Economy**” package when this has been implemented as the UK is required to do by law.

I trust this information is helpful and informative to you and you will act with due diligence and prudence to ensure that the good citizens of not just East Cardiff but all the City and greater region will benefit from a positive outcome of refusal of the application and a commitment to taking a different route in handling our waste management issues.

I look forward to your response

Yours sincerely,

J.G.Cuffe M.Inst.A.M., M.Inst.F.M.