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## NORTH AYRSHIRE COUNCIL

22nd January 2020

### Planning Committee

Locality	Irvine
Reference	19/00539/PPM
Application Registered	29th July 2019
Decision Due	29th November 2019
Ward	Irvine South

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<b>Recommendation</b>	Approved subject to Conditions
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<b>Location</b>	16-20 Murdoch Place Oldhall West Industrial Estate Irvine Ayrshire KA11 5DG
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<b>Applicant</b>	Doveryard Ltd Fao Simon Brown
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<b>Proposal</b>	Development of Energy Recovery Facility (ERF) to include (1) the erection of materials recycling/fuel preparation building; (2) the erection of energy recovery building for the production of electricity and heat with associated (60m high) exhaust flue; and (3) the provision of associated site facilities to include silos, access roads, parking, attenuation pond, landscaping and security fencing
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### 1. Description

Planning permission is sought for the development of an energy recovery facility (ERF) on vacant brownfield land at Oldhall West Industrial Estate, Irvine. The site is around 1.5 hectares in area, and is bounded by Murdoch Place to the north, industrial land to the west and open ground associated with the Oldhall Ponds Wildlife Site to the east and south. The site, which has been levelled, contains three industrial buildings which have been used in the past for waste management purposes. The rest of the site is largely hard surfaced and is clear of vegetation other than several small areas of (unmaintained) amenity grassland. Several spoil heaps, consisting of bricks and rubble, have been tipped around the site.

The proposed development involves the clearance of the site (including the demolition of 3 existing industrial buildings) in order to erect an industrial facility to sort, separate and

process up to 180,000 tonnes of residual commercial and industrial waste as well as municipal solid waste per annum.

The purpose of the development would be the recovery of the energy from waste materials that cannot be recycled, thus avoiding these waste materials going to landfill. Energy recovery would be achieved through incineration. The heat would then be used to produce steam, from which turbines would generate electricity that would both power the plant (3MW) and supply the national grid (12MW). The proposed ERF has also been designed to allow for a "heat offtake" should a suitable end user be identified, most likely be businesses in the surrounding industrial estate and nearby business parks. Heat (either in the form of steam or hot water) would be exported from the plant using insulated pipes buried underground. In terms of employment, the applicants have estimated that, during the 3-year construction phase, around 200 people would be employed. Once complete, the plant would provide between 25 and 30 jobs.

The applicant has already agreed terms with the operator of the adjacent waste management facility (Lowmac Alloys) to make use of the refuse derived fuel (RDF) from their recycling process. In line with the legislative requirements, all feedstock would have undergone pre-treatment to remove economically viable recyclable materials. The feedstock would be classed as non-hazardous and be derived from municipal, commercial and industrial sources. The majority of the feedstock for the plant would be Refuse Derived Fuel (RDF) which will include non-recyclable plastics, card, paper, and other combustible materials which remain after normal recycling processes extract materials that can be reused or recycled.

The rest of the feedstock would be obtained from contracts with other waste companies who would supply the site with materials that would otherwise go to landfill. Any materials which could be recycled would be removed at the first stage of the process in a recovery facility. No hazardous or clinical waste would be accepted or processed at the proposed facility.

Once any recyclable materials are removed, the feedstock would then be incinerated to recover the energy embedded in the waste materials. This would involve a process known as CFB (circulating fluidised bed) combustor technology. The heat produced in the process would be applied to water and used to produce high temperature steam (500 degrees Celsius) in a boiler.

The high temperature steam would then be used for generating an estimated 15MW of electricity per annum, of which 3MW would be used by the facility itself. Electricity would then be supplied to the national grid and/or directly to nearby local businesses or residential areas.

The heat generated by the process would also be available for distribution to local businesses or residential areas (e.g. via a district heating system or equivalent). A heat plan has been prepared in this respect.

The main solid by-product of the incineration process is known as bottom ash, which can be used to create secondary aggregates for use in concrete production. Any remaining metal left from the recovery process would be removed during the bottom ash recycling process through magnetic sorting and would be taken for reuse. The plant would also produce Air Pollution Control Residues (APCR) from the cleaning of the process gases emitted through

the flue stack. The APCR would need to be collected and taken to a specialist treatment facility.

The proposed development involves three main elements. Firstly, the site access from Murdoch Place would lead to a weighbridge, staff parking area and hard-surfaced yard. Surface water (i.e. rainwater) from the yard would be collected and treated in a SuDS pond before being discharged to a nearby watercourse.

Secondly, a materials recovery facility (MRF) building, finished using grey coloured metal cladding and translucent GRP panels, measuring 64m x 33m on plan (giving a footprint area of 2,112 square metres) and approximately 17.5m in height. The MRF building would have the appearance of a flat-roofed industrial shed (a parapet would conceal a portal framed pitched roof system). It would be used for the pre-treatment of waste arriving at the site. Provision has also been made in the project for other sources of segregated non-hazardous waste to be accepted and processed in the MRF: this would remove any remaining recyclable material and then shred the waste prior to transfer by conveyor to the next stage. Odour control measures would be employed in this process.

Thirdly, the MRF building would be linked by a conveyor to an Energy Recovery Facility (ERF) building. The ERF building would resemble a modern power station, clad using different shades of grey in 15m horizontal bands to provide visual relief. It would measure 55.5m x 63m on plan (giving a footprint of 2,960 square metres) and would vary in height from approx. 12.5m through several 'stepped' stages up to a maximum of 47m. This building would contain a boiler hall, turbine hall, electrical room and all associated ancillary facilities necessary to the process of incineration, heat recovery, electricity generation and condensing. The ERF building would link to a flue gas treatment area which would treat the emissions from the incineration process before passing through a free-standing flue gas stack, which would have a maximum height of 60m (and could potentially be lower, depending on the detailed design process post-planning) and 2.5m in diameter. The flue stack would be sited adjacent to the ERF building.

A variety of other tanks, plant and equipment would be installed adjacent to the ERF building to ensure the processes operate safely and in accordance with the submitted environmental reports. An electricity sub-station to connect the site to the national grid would also be developed.

The site would also provide yard areas for vehicle movements and parking. The SuDS attenuation pond is proposed to the west of the site, and areas of tree planting would take place near the southeast boundary of the site. Tree species would be selected to minimise their attraction to birds (for aviation safety reasons).

The application is classed as a major development in terms of The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009. Public pre-application consultation (PAC) was required and a proposal of application notice was received on 26th April 2019, giving details of publicity for a public event (details below).

Due to the potential for significant environmental effects, proposals of this type are included within Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. As such, the preparation of an EIA Report is a mandatory requirement. Prior to the submission of the planning application, a Scoping Opinion was requested by the applicant (ref. 18/00986/EIA) and issued by the Council on 10th December

2018. The planning application is accompanied by an EIA Report which has been prepared following the scoping exercise.

Planning permission was granted in January 2009 for a gasification plant on the site (ref. 07/00072/PP), the purpose of which would have been to generate 7MW of electricity per year from waste materials. However, this plant was not built, and the planning consent has now lapsed. The associated legal obligation, which would have required 90% of the waste materials to be sourced from North Ayrshire, was discharged during 2017 in order to unburden the title deeds for the land.

In support of the application the following documents have been submitted:

### **Pre-application consultation (PAC) Report**

The PAC report notes the publicity measures undertaken and a public event was held at The Gailes Hotel on 4th June 2019. Elected representatives were invited to attend, as were local residents, businesses and both the Irvine and Dundonald Community Councils. The event attracted 12 visitors, including eight members of the public and representatives from GSK. The main issues raised by those attending was in relation to air quality, the source of the feedstock and the export process for the energy.

### **Design and Access Statement**

The document appraises the site in terms of the proposed use of the site, amount of development, layout, scale, landscape/topography, appearance and access. It explains that the proposed layout would be as compact as possible, in order to minimise the amount of land used, in a location that has a well-established industrial context beside existing recycling facilities that would reduce traffic generation to and from the facility. The building design aims to enclose and screen the functional requirements of the process using external materials chosen to limit visual impact whilst having an obvious industrial character, not dissimilar to many of the large buildings nearby, such as the paper mill and GSK.

### **EIA Report**

The report comprises a series of chapters, as follows:

1. Planning Statement
2. Site description
3. Development and Alternatives
4. Approach to EIA
5. Planning Policy
6. Air Quality
7. Landscape and Visual Impact
8. Traffic and Highways
9. Noise and Vibration
10. Water Environment
11. Ecology
12. Climate Change
13. Cumulative Effects

### **Non-technical summary of EIA Report**

This document provides, in non-technical language, a brief summary of the likely significant effects that the proposed development would have on the environment.

### **Air Quality Assessment/Health Impact Assessment**

The above assessments were undertaken using detailed atmospheric dispersion modelling, which enables a series of inputs and variables to be processed by a computer model, taking the location and characteristics of the site and its surroundings into account. The results of the model predicted that pollutants, such as nitrogen dioxide, sulphur dioxide, hydrogen chloride, hydrogen fluoride and dioxins would be well below the limits defined within Scottish Air Quality Regulations or relevant levels recommended by SEPA. The authors state that the overall conclusion from the detailed modelling is that the potential impact on local air quality is likely to be small, and that the levels of pollutants emitted by the chimney flue are unlikely to have a significant impact on the health of people living and working nearby. (Note: The regulation of emissions is a matter for SEPA in line with the EU Industrial Emissions Directive. The applicant would require a separate Pollution Prevention and Control (PPC) licence from SEPA to operate the proposed facility in the event of planning permission being granted).

### **Flood Risk and Drainage Assessment**

In this document, consideration is given to all potential sources of flooding. No history of flooding has been identified. The risk assessment concludes that the site is overall at negligible risk of flooding, which is consistent with its geographic location, topography and ground levels. An outline surface water management strategy has been developed, indicating that runoff can be managed via SuDS in the form of an attenuation pond for all storm events up to a 1 in 30 year event. More severe flood events will be contained on hardstandings within the site, with water levels predicted not to exceed 4cm in depth. Discharge from the SuDS pond would be controlled to greenfield equivalent run-off rates, which would reduce flood risks to the surrounding land. Further design work would be required to finalise the drainage arrangements in the event of planning permission being granted.

### **Preliminary Ecological Appraisal Report**

This report notes that a survey was undertaken during October 2018 in accordance with best practice methodology. An associated desk survey was also undertaken. The appraisal identified the potential for a number of protected species within the survey area, which included both the site and the surrounding area, up to 250m away. The study notes that further surveys would be required (as the validity of such a survey is around 18 months) in the development proceeding. There is a potential need for licences from Scottish Natural Heritage to address any potential habitat disturbance arising from the proposed development.

### **Preliminary Land Quality Risk Assessment**

The study highlights past and present potentially contaminative land uses at and adjacent to the site. Potential pollutant linkages may be present in relation to human health from soils, water supply and ground gases; property risks from ground stability and to the water environment from sources of contamination within soils and groundwater. Intrusive site investigations and the preparation of risk assessments are therefore recommended by the authors to confirm any outstanding pollution linkages and to inform the more detailed design stage for the development in the event of planning permission being granted.

### **Traffic Emissions Assessment**

The purpose of this report is to consider the impacts of road traffic emissions on the surrounding environment. The report estimates that the development, once complete, would generate 68 HGV movements (defined as a vehicle greater than 3.5 tonnes in weight)

and a total of 118 vehicle movements per day on the nearby B7080. Traffic is estimated to be split 65% between the northern approach (i.e. from the A71 and B7080) and 35% from the southern approach (ie. from the A78 and B7080). The effects on air quality associated with vehicle movements to/from the proposed development is estimated to have an insignificant effect at the receptor locations which were studied.

### **Heat Plan**

The Heat Plan identifies a number of potential users of the heat output from the proposed plant. These include existing nearby industrial and business premises, as well as potential future industrial developments within i3 (formerly Riverside Business Park). The applicant is proposing to use a heat recovery system to provide hot water in the form of a district heating loop via a 'private' insulated pipeline. Although precise routes are likely to be subject to change, an indicative design for the heating loop has been indicated. Consideration is also being given to the supply of 200 degree steam and electricity direct to GSK.

The application site is located at the southern edge of the Oldhall Industrial Estate to the southeast of Irvine. Oldhall was established during the 1970s by Irvine Development Corporation as a purpose-built location for certain types of incoming industry to Irvine New Town.

There are a variety of industries nearby, including a large recycling plant (Lowmac), a precast concrete block making factory (Hillhouse) and the Council's waste pulverisation plant. Nearby is the large pharmaceutical works of GSK and the UPM paper mill. There are a variety of other small and medium sized businesses in the surrounding area.

The site is accessed from the strategic road network via Moss Drive/Long Drive (B7080) which links to the A78 to the south at Newhouse Interchange and the A71 to the north at Greenwood Interchange.

Oldhall has tended to attract waste processing and yard type business uses. It adjoins a more modern industrial estate to the north, originally known as Riverside and now known as i3. Riverside was designed on 'business park' principles containing office pavilions with parking and high amenity landscaped areas. Oldhall and i3 are separated by mature woodland. It is relatively remote from residential areas.

There is a local nature reserve known as Oldhall Ponds to the south and east of the site. This area covers 13.72 hectares and comprises native woodland with several ponds. There is a pedestrian path around the reserve, the route of which passes relatively close to the southern boundary of the site.

In terms of the adopted Local Development Plan, the site is allocated for business and industry. The following policies are applicable to the consideration of the proposal:

Strategic Policy 1 - The Towns and Villages Objective

Strategic Policy 2 - Placemaking

Policy 7 - Business and Industry Employment Locations

Policy 15 - Landscape and Seascape

Policy 16 - Protection of designated sites

Policy 18 - Forestry, Woodland, Trees and Hedgerows

Policy 23 - Flood Risk Management

Policy 29 - Energy Infrastructure Development

## **2. Consultations and Representations**

Neighbour notification was carried out and the application was advertised in a local newspaper in accordance with statutory procedures. No representations have been received.

### **Consultations**

**Glasgow Prestwick Airport** - no objection to this proposed development on statutory safeguarding grounds. GPA understand from the application submitted that there is no proposal to process food waste through this site. Should this condition change then further communication and agreement must be sought from Glasgow Prestwick Airport. Buildings do not provide a food source in themselves; however, buildings may be used by birds depending upon the design and use of the building and the availability of food in the nearby environment, therefore wherever possible measures to minimise their attractiveness should be taken such as self-closing doors to prevent access by birds or openings should have plastic strip curtains fitted. As advised in the application, GPA agree that due to the height and position of the flue stack, there is a requirement for an omni-direction red warning light to be fitted at the top of the flue. It should also be noted that if the warning lights becomes unserviceable it should be reported immediately to Glasgow Prestwick Airport (GPA), Air Traffic Control (ATC) so that notification can be advised to pilots through the appropriate channels.

*Response: A condition can be attached in relation to the points raised by Glasgow Prestwick Airport in relation to the need for an omni-direction red warning light on top of the flue stack in the interests of aviation safety. There would be no food waste processed at the site, a matter which would be confirmed by condition.*

**SEPA** - no objection, following a review of the proposal and a meeting with the applicant to discuss matters which were of concern. The development would be subject to the need for a Pollution Prevention and Control (PPC) licence, which SEPA administer and regulate. The applicant has confirmed the use of a high-massing attenuation solution within the main hall structure to enclose these elements of the plant and will mandate this design feature within their engineers' requirements as part of the tendering process. This would mean that the turbine and generators are mounted on a solid concrete raft and are enclosed within a concrete walled structure. SEPA is satisfied that this design approach addresses such concerns and can therefore remove an objection regarding this issue. In addition, on the basis of the example plants highlighted (Lostock Gralam and Parc Adfer) and the summary calculations of expected plant performance, SEPA believe that applicant has demonstrated that it can achieve 20% energy efficiency target on start-up, in line with Annex 1 of the Thermal Treatment of Waste Guidelines (2014). The applicant has confirmed a SuDS solution for the site. SEPA recommends that the drainage proposals meet with the Council's policy for drainage, SuDS, and flooding.

*Response: Noted. This outcome follows two previous objections which have now been resolved to SEPA's satisfaction. As noted above, the operation of the plant would primarily be regulated by SEPA under a PPC licence. However, conditions could be attached regarding the matters raised by SEPA which fall within the remit of planning.*

**NAC Environmental Health** - no objections to the development subject to a range of recommendations in relation to site investigation/risk assessment, air quality studies and the mitigation of construction impacts.

*Response: A condition could be attached in respect of the recommended site investigation condition. Air quality has been addressed in the supporting EIA Report and appropriate measures incorporated into the design of the flue to remove harmful pollutants, as discussed above. Air Pollution Control Residues would be removed, condensed, stored in silos and taken off site by road tanker. The other matters have been raised directly with the applicants by Environmental Health for their consideration under other legislation.*

**NAC Active Travel and Transport** - no objections to the development subject to the condition that the first 5 metres of the private access shall be hard surfaced in order to prevent loose material from being deposited onto the public road.

*Response: Noted. The access to the site is already formed and is fully hard surfaced with asphalt. As such, there is no need for such a condition.*

**Scottish Natural Heritage** - no objections. SNH has considered the conclusions of the Environmental Statement and with respect to the potential impacts on the natural heritage, concurs with the findings reached.

*Response: Noted.*

**Scottish Water** - no objection to the proposal. There is adequate capacity within the public water and public sewers to serve the development. Surface water should be treated using SuDS and will not be accepted to the sewer network via a combined sewer. Records indicate that the development proposals impact on existing Scottish Water assets. The applicant must identify any potential conflicts with Scottish Water assets and contact the SW Asset Impact Team directly.

*Response: Noted. A condition could be attached with regards the proposed SuDS drainage arrangements. An informative could be attached with respect to potential impacts on Scottish Water assets.*

**South Ayrshire Council** - no objection. Although the proposal includes the construction of a chimney structure of some 60 metres in height, which will, doubtless, be visible from South Ayrshire, given the location of the site within an existing industrial area, the presence of large scale industrial development intervening between it and the South Ayrshire boundary (e.g. the paper mill), the site is approximately 2.5km north of the nearest residential property in South Ayrshire and the prevailing wind comes from the southwest, South Ayrshire Council has no objection to the proposed development.

*Response: Noted.*

No comments have been received from Irvine Community Council, East Ayrshire Council, the Health & Safety Executive, Historic Environment Scotland or the Scottish Wildlife Trust.



### **3. Analysis**

In accordance with statute, planning applications require to be determined in accordance with the provisions of the development plan unless material considerations indicate otherwise.

As noted above, there are ten relevant development plan policies, the first of which is Strategic Policy 1 - The Towns and Villages Objective. This strategic policy states that, in principle, the Council will support development proposals within towns and villages which generate new employment opportunities to meet market demands, with priority given to the re-use of brownfield land. As noted above, the proposed development has the potential to generate around 30 jobs, once the site is operational. The site is also brownfield land, having previously been used for waste management purposes. The proposal is therefore considered to accord with Strategic Policy 1.

The assessment of the proposal against Strategic Policy 2 – Placemaking will take place after consideration of the detailed topic-based policies.

Policy 7 – Business and Industry Employment Locations indicates that proposals for waste recycling and power generation plants are considered to be suitable land uses within the areas of North Ayrshire that have been identified in Schedule 5 of the LDP. The site is within the i3 area of Irvine, which is listed in Schedule 5. Subject to assessment against the other policies below, the proposal would therefore be acceptable in terms of its location within an established industrial site.

In terms of Policy 15 – Landscape and Seascape, the application is supported by a comprehensive landscape and visual impact assessment, which considers the vertical scale of the development and its effects on the surrounding area. The assessment notes the presence of existing industrial buildings and flue stacks nearby, such as UPM and GSK, as well as the relative distance from residential areas. The landscape character type (LCT) of the countryside near the site is defined in the Ayrshire Landscape Character Assessment (1998) as part of the Ayrshire Lowlands. It is considered that the approach taken in the application to mitigate the apparent height and scale of the buildings through the use of grey coloured banding, and to break-up the massing of the various elements using a series of cuboid shaped 'boxes' is appropriate. In terms of the surrounding land, which is heavily wooded to the immediate south, the proposed buildings and flue would rise above the tops of the trees. However, when viewed from a close distance, such as the nearby footpaths, the trees would filter and obscure direct views of the development. Only when the development is viewed at a greater distance from the site would the true extent of its vertical scale be evident. Nonetheless, the relatively low-lying and flat character of the surrounding landscape would tend to diminish the visual impact of the development, as evidenced by the photomontages which demonstrate that the overall effects would be localised, with the building and flue heights not appearing especially significant from many viewpoints. In essence, the development would appear as a relatively small feature within a wide, flat lowland landscape that is already developed with various forms of industry with tall flue stacks and large scale wind turbines. Additionally, as the extent of the site is small, at just over 1 hectare, the development would not give rise to the more significant impacts created by the much more extensive industrial complexes nearby, such as GSK and UPM. In terms of impacts on settlements and residential properties, the relatively long separation distances and buffering effects created by woodland belts, hedgerows, other established landscape features and existing buildings would tend to reduce, rather than intensify, the vertical scale

of the proposed development. The proposal also includes some woodland planting at the southeastern corner of the site, which would reinforce existing woodland and strengthen the landscaped buffer between the site and the wider countryside beyond the edge of Irvine. The proposal does not involve development within, nor close to, a national scenic area, special landscape area, wild land area, local landscape feature, conservation area nor would it result in adverse effects on the landscape setting of Irvine. As such, it is considered that the proposal is acceptable in terms of Policy 15.

With regard to Policy 16 – Protection of our designated sites, the application site adjoins (but does not directly affect) a local nature conservation site, the Oldhall Ponds, which is managed by Scottish Wildlife Trust and is described as “a mosaic of willow carr, semi-mature planted woodland and tussocky grassland. The ponds have open water and emergent vegetation that is attractive to breeding and wintering ducks. Paths around the ponds provide opportunities for viewing waterfowl and other pond life.” In addition to the chapters in the EIA Report which address the water environment and ecology, the application is supported by a Preliminary Ecological Appraisal Report. The appraisal identified the potential for a number of protected species within the survey area, which included both the site and the surrounding area, up to 250m away. Subject to the implementation of the measures identified in the ecology report, it is considered that the proposed development would be acceptable in terms of Policy 16.

Policy 18 relates to Forestry, Woodland, Trees and Hedgerows. The proposals do not involve the clearance of any woodland. Although within close proximity to woodland at Oldhall Ponds, there is sufficient distance between the site and root systems for avoiding any damage to the existing trees. The proposal also involves a small area of tree planting at the southeast of the site. Glasgow Prestwick Airport has requested that any planting which takes place within the development is not attractive to birds, in order to reduce the risk of bird strike to planes overhead. As such, trees with berries or fruits would be avoided in the planting scheme, which would most likely be based on similar tree species as found at Oldhall Ponds. Nonetheless, it has been noted that the existing recycling and waste processing facilities nearby attract considerable numbers of birds, especially gulls. In view of this, a condition could be attached in relation to bird control measures for the proposed development (e.g. to reduce the attractiveness of the buildings within the development to birds, rather than the tree planting within the site). The proposal would therefore be acceptable in terms of Policy 18.

Policy 23 relates to Flood Risk Management. As noted above, the proposal is supported by a Flood Risk and Drainage Assessment and would feature a SuDS detention basin for the management and treatment of surface water. Foul water, which would be of limited quantity due to the anticipated number of staff and the nature of the industrial processes, would be drained to the public sewer. SEPA has no objection to the application, and neither does Scottish Water. The proposal is therefore acceptable in respect of Policy 23.

Policy 29 addresses the topic of Energy Infrastructure Development and highlights the Council's support for proposals which would contribute positively to our transition to a low carbon economy. Account is required to be taken of environmental impacts, public safety and zero/low carbon technologies. Many environmental impacts have already been discussed above. In terms of public safety impacts, the development would be subject to the need for a PPC licence from SEPA in order to operate. This would cover numerous pollution control measures, with SEPA being the regulatory body once the plant is operational. Discussions with SEPA have taken place and the development is potentially

consentable in terms of PPC. Transportation of materials to and from the site would be by road. As noted above, the site is well located for access from the strategic road network within an established, purpose built industrial estate. In relation to zero and low carbon technologies for new buildings, policy 29 also requires that proposals demonstrate that at least 10% of the current carbon emissions reduction set by the Scottish Building Standards will be met through the installation of low and zero carbon measures. As the proposal has been developed both as a recycling facility and to recover the energy embedded in previously manufactured materials as an alternative to landfill, the heat and power requirements of the entire site would be met from the on-site energy recovery processes. In the above ways, the development would contribute to the requirements of Policy 29.

Policy 30 on Waste Management Facilities requires that proposals align with Scotland's Zero Waste Plan and the Council's Waste Management Strategy. The proposal would provide a facility for recovering energy (power and heat) from waste which has been screened for recycling but is unable to be processed in this way. As such, the development would contribute to the wider Zero Waste agenda by dealing with what is termed residual waste. The Scottish Government is to ban all forms of biodegradable municipal waste, including residual wastes, from landfill from 2025. The scale of the proposed development would serve the regional market (i.e. west of Scotland). The choice of location for the development is compatible with the surrounding land uses and the proposal includes satisfactory mitigation of adverse impacts, such as odour. In respect of odour control, the applicant's agent has advised as follows:

- Combustion processes attenuate odour and so there will be no odour emitted associated with the combustion process. In this context process air is drawn through the plant from the bunker, through the combustion plant and then passes through the air pollution control plant.
- The flue would emit a visible plume on occasion (depending upon climatic conditions such as the air temperature and humidity) in the form of a steam (water vapour) plume similar to that associated with the nearby paper mill. Typically, plumes occur with low air temperatures, and so frequently occur at night. The extent of the plume will vary (due to climatic conditions) but normally is not large. It should be noted that the flue would not emit smoke.
- Flue gases are treated by passing the gas released by combustion through chemicals (such as sodium bicarbonate) to neutralise the acidity of the gas (i.e. reduce NO<sub>x</sub>/SO<sub>2</sub>). Activated carbon is then injected to absorb dioxins, furans and gaseous mercury. The gas is then passed through a bag filter to remove particulates and reaction reagents. The residues are automatically collected from the bag filters and collected via a sealed transfer system into storage tanks/silos within the site, which are then emptied when required, again via a sealed pipework system to the exporting vehicle. The complete process is enclosed to avoid the escape of gases to the atmosphere. The bag filters are enclosed units and housed within the building. Road tankers similar to those which transport cement or flour would be used to transport the residues off-site.

It is considered that the site is appropriately sited within an industrial area that is relatively remote from sensitive receptors, such as housing, and that the various pollution control measures embedded in the development would be adequate. As noted above, SEPA would regulate the operation of the site through a PPC permit, which would be sought separately. The proposal meets the requirements of Policy 30.

Turning to Policy 31 – Future Proofing for Heat Networks, a comprehensive heat plan has been prepared for the proposed development. Heat would be available for use in nearby industrial plants and the applicant is negotiating with various companies on the potential supply of heat (either as hot water or high pressure steam). Heat would be supplied using insulated pipework. The main planning issues in this regard are that (a) the technology within the plant would provide both heat and power and (b) the location of the site, within a large industrial complex, means that a district heating system is a possibility both for existing industrial users and future businesses within i3. The proposal can therefore be supported in terms of Policy 31.

Finally, turning to Strategic Policy 2 - Placemaking, the proposal has been assessed in terms of the relevant criteria as follows:

In terms of distinctiveness, the design of the proposed plant has taken into account the vertical scale of the building that would house the ERF processes, as discussed above. The building would be broken up into a series of boxes with a colour scheme involving various shades of grey, the purpose of which is to help reduce its apparent scale and bulk. A similar approach was taken at the UPM paper mill, which is 1km to the south of the application site. The taller buildings at UPM, developed during the late 1980s, are graded in a series of blues, greys and white. Within this flat landscape, where there can be longer views from a variety of visual receptors (such as road and rail corridors, footpaths, open spaces and settlements) this approach has worked successfully. Applying similar principles to the proposed development at Oldhall, which is relatively remote from any housing or residential areas, would offer an appropriate design solution to buildings of this scale.

It is considered that the development would be resource efficient through the use of sustainable water management, recovery of energy from waste materials and the provision of heat and power to nearby industrial sites.

The development is not designed to be adaptable, as it would serve as a dedicated energy generation/waste management use for an estimated 25-year period. However, the site is brownfield in nature and the development would re-use previously developed industrial land in productive manner.

In conclusion, the application is considered to accord with the LDP, and the development would provide facilities that would enable up to 180,000 tonnes of materials to be diverted away from landfill each year, with electricity, heat and ash (for aggregate manufacture) produced as a result of the process. The development would also lead to the recycling of salvageable materials, thus contributing to the circular economy and Scotland's Zero Waste Plan. The applicant estimates that the development would generate around 200 construction jobs and around 30 permanent jobs once the facility is commissioned. Accordingly, the application should be approved subject to the conditions referred to in this report.

#### **4. Full Recommendation**

Approved subject to Conditions

##### **Condition**

1. That the development hereby approved shall be implemented in accordance with the details and recommendations contained in the supporting documentation submitted with the planning application unless otherwise indicated below, all to the satisfaction of North Ayrshire Council as Planning Authority.

**Reason**

To secure the implementation of the development in accordance with the supporting information.

**Condition**

2. That prior to the commencement of the development, hereby approved, the applicant shall carry out a programme of site investigations at the application site, (including the review of any previous site investigations) to assess the likelihood of contamination and to inform any subsequent suitable quantitative risk assessment as advocated in BS10175: 2011. Remediation proposals shall also be presented in relation to any significant findings. All documentation shall be verified by a suitably qualified Environmental Consultant and submitted to North Ayrshire Council as Planning Authority. Any required remediation measures shall be undertaken, prior to the commencement of the development to the satisfaction of North Ayrshire Council as Planning Authority. Thereafter the presence of any significant unsuspected contamination, which becomes evident during the development of the site, shall be reported to North Ayrshire Council and treated in accordance with an agreed remediation scheme. On completion of the proposed works written verification, detailing what was done by way of any remediation, shall also be submitted to the North Ayrshire Council as Planning Authority.

**Reason**

In the interests of environmental protection.

**Condition**

3. That, for the avoidance of doubt, surface water arising from the development of the site shall be treated and managed using a SuDS system. Prior to the commencement of the development, hereby approved, confirmation shall be submitted in writing to North Ayrshire Council as Planning Authority and certified by a suitably qualified person that a scheme to treat the surface water arising from the site has been prepared in accordance with the principles and practices contained in 'The SuDS Manual' (CIRIA report C753, published November 2015). Thereafter, the certified scheme shall be implemented prior to the completion of the development and maintained thereafter to the satisfaction of North Ayrshire Council as Planning Authority.

**Reason**

In the interests of securing a sustainable drainage scheme for the development.

**Condition**

4. That, prior to the commencement of any building operations, the applicant shall submit for the written approval of North Ayrshire Council as Planning Authority a detailed schedule of the proposed external finishes (inclusive of colour scheme), boundary treatments and ground surface treatments to be used in the development. For the avoidance of doubt, there shall be no natural lighting panels on the external walls of the turbine hall. Thereafter, the development shall be implemented only in accordance with

such details as may be approved, unless otherwise agreed in writing with North Ayrshire Council as Planning Authority.

**Reason**

To mitigate landscape and visual impacts and in the interests of amenity.

**Condition**

5. That the development shall be implemented to the satisfaction of North Ayrshire Council as Planning Authority in accordance with the details set out in the 'Design Principles Briefing Note - Acoustics' as prepared by SOL Environment Ltd dated 12th November 2019, unless otherwise agreed in writing with North Ayrshire Council as Planning Authority.

**Reason**

To ensure that an appropriate strategy is implemented during the construction of the development for the attenuation of low frequency noise generated by the Energy Recovery Facility.

**Condition**

6. That, prior to the commencement of any landscaping of the site, the applicant shall submit for the written approval of North Ayrshire Council as Planning Authority a scheme of tree planting, which shall include details of species, planting densities, soil treatment and aftercare. For the avoidance of doubt, the area for tree planting shall be limited to the southeast corner of the site only. In addition, the species to be selected for the scheme shall be similar to the trees within the adjacent woodland at Oldhall Ponds. Trees which produce berries or fruits attractive to birds shall be excluded from the scheme. Thereafter, the tree planting scheme as may be approved shall be implemented prior the development becoming operational and retained thereafter to the satisfaction of North Ayrshire Council as Planning Authority.

**Reason**

To mitigate landscape and visual impacts and in the interests of amenity.

**Condition**

7. That the flue stack shall be fitted within an omni-directional red warning light which requires to be commissioned immediately upon erection of the stack. The warning light shall be operated continuously during hours of darkness and permanently retained in working condition thereafter unless otherwise agreed in writing with North Ayrshire Council as Planning Authority.

**Reason**

In the interests of aviation safety.

**Condition**

8. That, following the removal of all recyclable materials within the Materials Recovery Facility hereby approved, the feedstock for the Energy Recovery Facility hereby approved shall be limited to non-hazardous materials derived from municipal, commercial and industrial sources. The plant shall be designed to operate up to a maximum tonnage of 180,000 tonnes of refuse derived fuel per annum. For the avoidance of doubt, there shall be no food waste, medical waste or hazardous waste accepted at the site.

**Reason**

To define the terms and limitations of the consent in relation to the scope of the application.

**Condition**

9. That the development shall be implemented to the satisfaction of North Ayrshire Council as Planning Authority in accordance with the details set out in the 'Design Principles Briefing Note - Efficiency' as prepared by SOL Environment Ltd dated 12th November 2019, unless otherwise agreed in writing with North Ayrshire Council as Planning Authority.

**Reason**

To ensure that an appropriate strategy is implemented for utilising the heat generated by the Energy Recovery Facility.

Russell McCutcheon  
Executive Director (Place)

For further information please contact Mr A Hume Planning Officer on 01294 324318.

## Appendix 1 – Location Plan

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