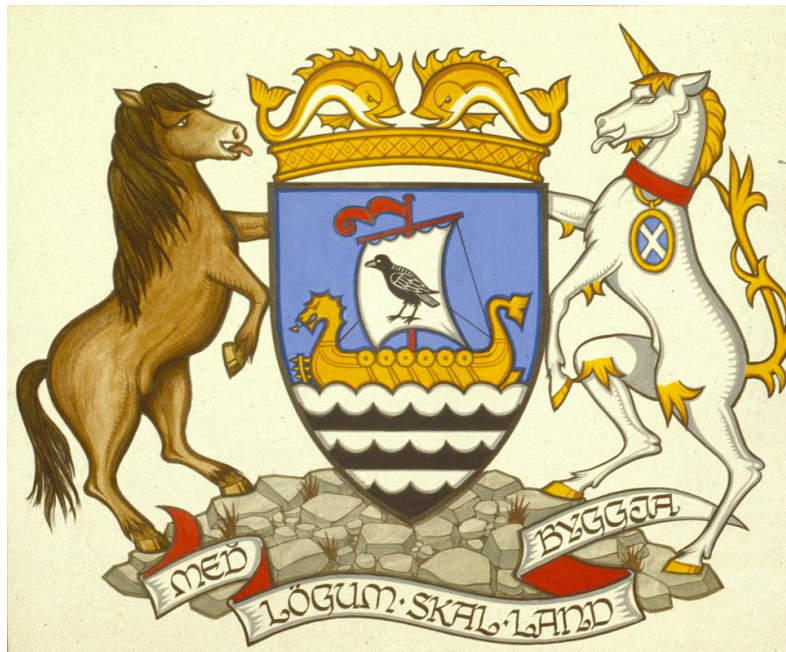


Annual Progress Report (APR)



2022 Air Quality Annual Progress Report (APR) for Shetland Islands Council

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

12th September 2022

Shetland Islands Council

| Information | Shetland Islands Council |
|--------------------------------|--|
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| Date | 12 th September 2022 |

Executive Summary: Air Quality in Our Area

Air Quality in Shetland Islands Council

This report considers local air quality management in Shetland, taking into account relevant policy and technical guidance documents.

Since the council's annual progress report for 2021 there has been further progress in continuing to meet and supersede the targets as detailed in the projects contained in table 2.1 that will have a positive impact on local air quality. Ongoing initiatives for 2022 are also detailed in this table. This holistic vision of local air quality in concert with other carbon reducing initiatives such as roll out of increased EV fleet and charging networks will result in a positive impact on Shetlands local air quality. Further developments in the planning phase of large scale industrial net zero projects coupled with the impending completion of the councils net zero route map bring opportunities for further carbon reduction within the local authority area.

The gradual decline in the offshore oil and gas industry operating throughout the islands has slowed and has seen an increase in the area of decommissioning of redundant offshore oil installations. Air transport and infrastructure movements have seen subdued increases in the recovery from COVID-19 impacts resulting in demand for oil and gas support operations, while normal passenger transport remains relatively stable. Though the overall numbers are reduced due to the full effect of the closure of Scatsta airport impact the annual figures.

Ongoing planning approvals for major wind farm developments has continued to offer the potential significant reductions of fossil fuel generated electricity supplies throughout the islands, though no formal announcement has been made as to the commencement of works for these projects.

Finally projects, including a new space centre in Unst, are commencing construction, these being subject to suitable environmental controls will minimise environmental impacts, including air quality indicators.

This annual progress report concludes that detailed assessments are not required for any pollutant at this time.

Actions to Improve Air Quality

Shetland Islands Council currently has no AQMA's or action plans and is not undertaking any other air quality related activities. This position is qualified by historic sampling data indicating no exceedances of national air quality objectives are likely to occur within the local authority area. Furthermore, reductions in the oil and gas exploration and process industry and linked reductions in the aviation support for this sector will result in a decrease in pollutants being released to atmosphere. Furthermore, overall reductions can be attributed to a continued downturn in economic activity combined with technical developments within existing local industry to reduced levels of emissions through effective carbon management. These factors combined support the Shetland Islands Council's current position.

Local Priorities and Challenges

Shetland Islands Council is committed to maintaining and improving local air quality within the local authority area. To achieve this goal the Council aims to actively assess all new developments submitted to the local authority planning department to ensure they comply with national air quality objectives and maintaining Shetland's high standard of air quality.

How to Get Involved

To receive information on air quality or to report any concerns, the general public are encouraged to contact:

Environmental Health & Trading Standards Department,
Shetland Island Council,

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1 Local Air Quality Management

This report provides an overview of air quality in Shetland Islands Council during 2021. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Progress Report (APR) summarises the work being undertaken Shetland Islands Council to improve air quality and any progress that has been made.

Table 1.1 – Summary of Air Quality Objectives in Scotland

| Pollutant | Air Quality Objective Concentration | Air Quality Objective Measured as | Date to be Achieved by |
|---|--|-----------------------------------|------------------------|
| Nitrogen dioxide (NO ₂) | 200 µg/m ³ not to be exceeded more than 18 times a year | 1-hour mean | 31.12.2005 |
| Nitrogen dioxide (NO ₂) | 40 µg/m ³ | Annual mean | 31.12.2005 |
| Particulate Matter (PM ₁₀) | 50 µg/m ³ , not to be exceeded more than 7 times a year | 24-hour mean | 31.12.2010 |
| Particulate Matter (PM ₁₀) | 18 µg/m ³ | Annual mean | 31.12.2010 |
| Particulate Matter (PM _{2.5}) | 10 µg/m ³ | Annual mean | 31.12.2021 |
| Sulphur dioxide (SO ₂) | 350 µg/m ³ , not to be exceeded more than 24 times a year | 1-hour mean | 31.12.2004 |
| Sulphur dioxide (SO ₂) | 125 µg/m ³ , not to be exceeded more than 3 times a year | 24-hour mean | 31.12.2004 |
| Sulphur dioxide (SO ₂) | 266 µg/m ³ , not to be exceeded more than 35 times a year | 15-minute mean | 31.12.2005 |
| Benzene | 3.25 µg/m ³ | Running annual mean | 31.12.2010 |
| 1,3 Butadiene | 2.25 µg/m ³ | Running annual mean | 31.12.2003 |
| Carbon Monoxide | 10.0 mg/m ³ | Running 8-Hour mean | 31.12.2003 |

2 Actions to Improve Air Quality

Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare an Air Quality Action Plan (AQAP) within 12 months, setting out measures it intends to put in place in pursuit of the objectives.

Shetland Islands Council currently does not have any AQMAs. Shetland Islands Council does not have a published air quality strategy document as past evidence indicates no exceedances exist within the local authority area. This situation may be reviewed in the future.

Cleaner Air for Scotland 2

[Cleaner Air for Scotland 2 – Towards a Better Place for Everyone \(CAFS2\)](#) is Scotland's second air quality strategy. CAFS2 sets out how the Scottish Government and its partner organisations propose to further reduce air pollution to protect human health and fulfil Scotland's legal responsibilities over the period 2021 – 2026. CAFS2 was published in July 2021 and replaces [Cleaner Air for Scotland – The Road to a Healthier Future \(CAFS\)](#), which was published in 2015. CAFS2 aims to achieve the ambitious vision for Scotland "to have the best air quality in Europe". A series of actions across a range of policy areas are outlined, a summary of which is available on the Scottish Government's website.

Progress by Shetland Islands Council against relevant actions for which local authorities are the lead delivery bodies within this strategy is demonstrated below.

2.1.1 Place making – Plans and Policies

Local authorities with support from the Scottish Government will assess how effectively air quality is embedded in plans, policies, City Deals and other initiatives, and more generally in cross departmental working, identifying and addressing evidence, skills, awareness and operational gaps.

Shetland Islands Council has taken a holistic view when considering local air quality and measures designed either directly or indirectly to reduce pollutants in order to improve Shetlands already good air quality.

Focusing on place making it can be seen that the local authority does consider air quality in there recently published [Local development plan 2 Main Issues Report](#) and the attached [Strategic Environmental Assessment – Environmental Report](#).

The main issues this report takes account of when setting local development policy for Shetland are the targets set by the Scottish Government to end Scotland's contribution to climate change by 2045. These policy options will also be reflected in the Council's yet-to-be published Net Zero Route Map. Although these policy documents do not specifically mention air quality and the authorities commitment to continued reductions in national pollutant values to facilitate improved local air quality. They do however adopt the key principles stated in part 3 of CAFS 2, in that emphasis should be given on maintaining and developing mixed use neighbour hoods with:

- the population density to sustain local services, planned and in locations that reduces the need to travel unsustainably;
- makes best use of existing transport infrastructure; and
- builds in walking and wheeling as the most natural choice to get around.

As can be seen in the updates to Table 2.2 initiatives which mirror the above principles have been investigated, planned and implemented. This work is ongoing and will lead to the publication of a local Net Zero Route Map, aimed to develop local strategies to reach net zero in a manner that works aligned to island living.

2.1.2 Transport – Low Emission Zones

Local authorities working with Transport Scotland and SEPA will look at opportunities to promote zero-carbon city centres within the existing LEZs structure.

Shetland Islands Council has no Low Emission Zones established within the Local Authority area. It is anticipated that there will be no future need for the implantation of any LEZs due to the nature and character of the local urban areas. Motor vehicle usage is significantly lower in Shetland compared to mainland urban areas, historical monitoring

data qualified there are no exceedances of air quality objectives, supporting the authority's decision not to introduce any LEZ's within the Island group.

Referring to table 2.2, it can be noted that the local authority has actively been investing in both low emission EV vehicle fleets together with EV charging infrastructure, in both urban and remote rural locations. This investment and implementation of a low emission vehicle fleet coupled with development of a wider EV charging infrastructure will further reduce the need to investigate and implement LEZs in the local authority area.

Progress and Impacts of Measures to address Air Quality in Shetland Islands Council

Shetland Islands Council has taken forward a number of measures during the current reporting year of 2021 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.1. Key completed measures are:

- Resulting from continued review of current SIC EV pool vehicle fleet provided for council staff, has resulted in further expansion of investment in EV vehicles and a wider EV charging systems for council employees and the general public use to encourage further uptake in wider EV usage in the Islands.
- Feasibility work has commenced in relation to a 'Car Club' project aimed to open up a pool of EV vehicles to be made available to council and partner organisations staff for personal use out with work. This aims to reduce the number of second vehicles in families together with reducing the numbers of petrol and diesel vehicle in use on the islands.
- Formation of a Shetland Peat Partnership has been established with the aim of accelerating action on peatland restoration, to reduce carbon loss through peatland degradation.
- Completion of the 'Net Zero Route Map' for the islands council is close to completion. Establishing a baseline and pathways the route map will feed into an overarching climate change strategy. Further to this the route map will also feed into the councils own corporate and service planning to further aid carbon reduction in the organisation.

- Work continues on the Project Orion local energy hub for the production of carbon neutral power. Due to the size and complex nature of the project it is anticipated that this will take a number of years to bring to fruition.
- The council is progressing the business case for changing to fixed links for the outer isles as an alternative to the current use of roll on roll off ferries. Currently work is ongoing in relation to feasibility studies for the building of fixed links.

Shetland Islands Council expects the following measures to be completed over the course of the next reporting year:

A carbon literacy E-learning module has been developed and made available to council staff via online training portals and training workshops.

Table 2.1 – Progress on Measures to Improve Air Quality

| No. | Measure | Category | Focus | Lead Authority | Planning Phase | Implementation Phase | KPI | Target Pollution Reduction in the AQMA | Progress to Date | Estimated Completion Date | Comment |
|-----|--|---|---|-----------------------|--------------------------|---|-----|---|--|--|---|
| 1 | Development and introduction of Carbon Management Plan | Policy guidance and development control | Formal Adoption and embedding of local Carbon Management Plan for the SIC | Full Council | April 2015 | To April 2020 | | Target reduction on CO2 tonnes equivalent with an potential reduction in AQM target emissions | Ratified and adopted with ongoing implementation | April 2020 | Ongoing The needs for the updated Carbon Management Plan is currently being reviewed in line with the Net Zero Route Maps, which are nearing completion. |
| 2 | Investment and development of the local authority vehicle fleet to low emission vehicles | Vehicle fleet efficiency | Council investment in EV vehicles | Fleet Management Unit | Financial year 2014-2015 | Rolling program till 2020. Further expansion of this initiative through 2021 | | Targeted reduction on CO2 tonnes equivalent with an potential reduction in AQM target emissions | Implemented with option to expand, subject to ongoing review | Rolling program till 2020. Further expansion of this initiative through 2021 | Ongoing Currently the business case for the greening of the SIC Fleet (including action plan) is being prepared and nearing completion |
| 3 | Investment and development of low energy lighting systems within the local authority's estates infrastructure. | Policy guidance and development control | Replacement of lighting systems within council buildings | Building Services | Financial year 2014-2015 | Rolling program till 2018 | | Target reduction on CO2 tonnes equivalent with an potential reduction in AQM target emissions | Partially complete | Year end 2020 | Ongoing |

| | | | | | | | | | | | |
|---|---|---|---|-------------------|------------------------------|---|--|--|---------------|---------------|--|
| 4 | Investment and development of low energy street lighting systems within the local authority's area. | Policy guidance and development control | Replacement of old inefficient street lighting throughout the local authority area | Building Services | Financial Year 2016-2017 | Rolling program till completed | | Target reduction on CO2 tonnes equivalent with an potential reduction in AQM target emissions | Work underway | Year end 2020 | Ongoing |
| 5 | Introduction of Islands wide kerbside recycling. | Policy guidance and development control | Implementing central Government policy for kerbside recycling. Intended reductions to Landfill and incineration of waste. | Waste management | Year end 2017 | Year end 2018 | | Target reduction on CO2 tonnes equivalent with an potential reduction in AQM target emissions | Complete | Year end 2018 | Implemented on schedule, need for monitoring and re-enforcement |
| 6 | Construction and commissioning of a waste recycling facility to sort recyclable materials removing them from the disposal routes including incineration and landfill. | Policy guidance and development control | To sort recyclable materials, removing them from the disposal routes normally including incineration and landfill. | Waste management | March 2018 | 2 nd & 3 rd Quarter 2019 | | Target reduction on CO2 tonnes equivalent with a potential reduction in AQM target emission through reductions in burning waste and production of landfill gasses. | Complete | Year end 2019 | Building and plant in place, commissioning complete. Site fully operational |
| 7 | Expansion of Councils fleet of pool vehicles for essential car users employed within the local authority. | Promoting low emission transport | Provision of pool transport for essential car users, with low emission vehicles | Fleet management | 4 th Quarter 2018 | 1 st Quarter 2019 Further expansion of this initiative through 2021 | | Target reduction on CO2 tonnes equivalent with a potential reduction in AQM target emission through reductions in business miles driven with older less efficient vehicles | Ongoing | Year end 2019 | Further expansion of this initiative through 2021 A 'Car Club' project has been initiated to review opening up a pool of vehicles to SIC and partnership organisations. The option for this to be |

| | | | | | | | | | | | |
|----|--|---|--|----------------------------|--------------------|-------------|------|--|---------|-------------|---|
| | | | | | | | | | | | open to staff for personal use, and the community is also being reviewed as part of this project. An objective is to reduce the number of second cars, and the number of petrol/diesel cars in operation. |
| 8. | Planning, development and implementation of new Net Zero Route Maps for the local authority area | Policy guidance and development control | Development of a focused and measurable policy designed to achieve net zero carbon for the islands | SIC Environmental Services | Q3 & 4 2021 | Spring 2022 | TB C | Target reduction on CO2 tonnes equivalent to net zero, with a potential reduction in AQM target emission | Ongoing | Spring 2022 | The project is now nearing completion (Sept 2022), with baseline and pathways agreed. Next steps are to create an overarching climate change strategy and to incorporate actions from the route maps into service plans throughout SIC. |
| 9. | Devising of locally focused carbon use modelling. Focusing on establishing baseline data collection, | Policy guidance and development control | Focus on island wide carbon reduction through development modelling systems to aid | SIC Environmental Services | First quarter 2022 | Q3 & 4 2022 | TB C | Target reduction on CO2 tonnes equivalent to net zero, with a potential reduction in AQM target emission | Ongoing | Autumn 2022 | As above |

| | analysis and reporting | | reduction initiatives | | | | | | | | |
|-----|--|---|--|----------------------------|-------------|----------------------|--|--|----------------------------|-------------|--|
| 10. | Local participation of Scottish government peatland restoration scheme | Policy guidance and development control | Focus on carbon capture through effective peatland management | Scottish government | Q1 2020 | Ongoing through 2021 | | Target reduction on CO2 tonnes equivalent to net zero, with a potential reduction in AQM target emission | Ongoing | 2030 | Ten year rolling application program A Shetland Peatland Partnership has been set up with the aim to accelerate action on peatland restoration in Shetland. The Net Zero Route Maps have highlighted the extent on carbon emissions from degraded peatland in Shetland and the rate at which peatland restoration needs to take place |
| 11. | Development of locally focused carbon literacy training, for local businesses and the general public | Policy guidance and development control | Development of a locally focused carbon reduction education program for the general public | SIC Environmental Services | Q3 & 4 2021 | Autumn 2021 | | Target reduction on CO2 tonnes equivalent to net zero, with a potential reduction in AQM target emission | Planning phase to commence | Autumn 2022 | E-Learning module now in place and will be available for all SIC staff to undertake from September 2022 onwards. Regular |

| | | | | | | | | | | | |
|----|--|---|---|--|-----------|----------------------|--|---|---|------|---|
| | | | | | | | | | | | carbon literacy training workshops now available to SIC staff. |
| 12 | Proposed development of a Local Energy Hub Project Orion between the SIC and OGTC(Oil & Gas Technologies Centre), also linking with Scottish Hydrogen Fuel Cell Association-SHFCA | Policy guidance and development control | Focus on renewable electricity powering offshore oil and gas platforms from shore and producing industrial quantities of hydrogen | The Council and Highlands and Islands Enterprise | 2020-2022 | 2030 | | Target reduction on CO2 tonnes equivalent with a potential reduction in AQM target emissions through the production and use of low carbon fuels | Planning stages underway with a project team having been drawn together | 2030 | This is a long term project aimed at changing the energy market to a sustainable low carbon model |
| 13 | Investigation and planning the business case for Fixed Links within the Island group to supersede the use of inter-island ferries for travel between the main isles and the largest populated out islands. | Policy guidance and development control | Focus on major change to infrastructure provision for local inter-island travel | Scottish Government and Shetland Islands council | 2021-2022 | No timescale decided | | Target reduction on CO2 tonnes equivalent with an potential reduction in AQM target emissions | | | This project is in its early stages, feasibility studies being undertaken |

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives

Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

This section sets out what monitoring has taken place and how local concentrations of the main air pollutants compare with the objectives.

Shetland Islands Council does not undertake any automatic (continuous) monitoring within the authority's area. This is due to past monitoring results indicating that concentrations were all below the national objectives, thus negating the need for further monitoring.

3.1.2 Non-Automatic Monitoring Sites

Shetland Islands Council does not undertake any non-automatic (passive) monitoring of objective pollutants within the authority's area. This is due to past monitoring results indicating that concentrations were all below the national objectives, thus negating the need for further monitoring.

3.1.3 Other Monitoring Activities

Shetland Islands Council does not undertake any other forms of air quality monitoring within the authority's area.

Individual Pollutants

3.1.4 Nitrogen Dioxide (NO₂)

Shetland Islands Council does not undertake any non-automatic (passive) monitoring of NO₂ within the authority's area. This is due to historic monitoring results indicating that concentrations were all below the national objectives, thus negating the need for further monitoring

3.1.5 Particulate Matter (PM₁₀)

Shetland Island Council does not currently carry out monitoring of PM₁₀ due to past monitoring results indicating that concentrations were all below the national objectives, thus negating the need for further monitoring.

3.1.6 Particulate Matter (PM_{2.5})

Shetland Island Council does not currently carry out monitoring of PM_{2.5} and has no plans for future monitoring.

3.1.7 Sulphur Dioxide (SO₂)

Shetland Islands Council does not undertake any monitoring of SO₂ within the authority's area. This is due to past monitoring results indicated that concentrations were all below the national objectives, thus negating the need for further monitoring.

3.1.8 Carbon Monoxide, Lead and 1,3-Butadiene

Shetland Islands Council does not undertake any monitoring for CO, Lead and 1, 3-Butadiene within the authority's area and has no plans for future monitoring.

4 New Local Developments

Road Traffic Sources

Shetland has no new transport sources within the local authority area.

Other Transport Sources

Terminal passenger numbers at Sumburgh have seen an increase during 2021, rising from 116,745 in 2020 to 183,903 an increase of 58%. Due to the continued easing of travel restrictions implemented as a result of the response to COVID-19 it is expected that air travel will continue to increase through 2022, though growth may be moderated due to current world political and economic developments which could impact air travel over the coming year. Looking at freight tonnage it can be seen that this has also increased from 169 tonnes in 2020 to 189 tonnes in 2021 and increase of 12%.

Tingwall (Lerwick), Shetland's inter-island airport, has also seen a recovery in passenger numbers with the easing of COVID-19 restrictions, reporting an 87% increase in passenger numbers from 1,227 in 2020 to 2,300 in 2021. No figures are reported for freight tonnage carried on the inter-island air service.

As in previous returns it is noted that all airports in Shetland have never come close to the specified criteria indicating that a detailed assessment would be necessary and so there is no need for further consideration at this time.

Industrial Sources

Shetland has no new industrial sources within the local area.

Commercial and Domestic Sources

Shetland has no new commercial and domestic sources within the local authority area.

New Developments with Fugitive or Uncontrolled Sources

Shetland has no new developments with fugitive or uncontrolled sources within the local authority area.

However, it should be noted that the main ground works for the consented Viking Energy Wind Farm development, (2009/191/ECU) & (2018/335/ECUCON) as well as the associated electricity converter station and interconnector cable facilities (2009/224/PCO) & (2015/302/VCON), which commenced in earnest during the early months of 2020 continues at pace within the central mainland area of Shetland.

As a part of the planning process for this development the applicant was required to produce a Construction Environmental Management Plan (CEMP) detailing the controls to be implemented to mitigate fugitive emissions generated by the development works. In addition to the developer's own system of monitoring, there has been an ongoing program of compliance monitoring by Shetland Islands Council officers and external auditors to ensure full compliance of all planning conditions relevant to this development.

To date no significant substantiated complaints have been recorded pertaining to fugitive emissions from this development.

Following from the Viking windfarm development there are a further 2 significant wind farms which have received planning consent, 2016/098/ECUCON, Beaw Field Burravoe Yell Shetland ZE2 9BA and 2018/186/PPF, Mossy Hill Wind Farm, both have yet to be stated. A third large scale windfarm, 2017/373/ECUCON, West of Cullivoe South of Gloup Yell, is currently awaiting a planning decision. All of these developments have the potential to produce fugitive emissions or constitute uncontrolled sources within the local authority area.

These developments are expected to be started on completion of the current Viking windfarm development and associated interconnector cable to the Scottish mainland. Although smaller in scale than the Viking development these planned developments will be subject to the same or similarly equivalent environmental control as Viking and as such it is anticipated that fugitive emissions due to unmade construction roads will be kept to a minimum.

Finally Application 2021/005/PPF for a vertical launch space port including launch pad complex, satellite tracking station, assembly and integration hangar buildings, access and

servicing and infrastructure, which is to be built on land at Lamba Ness, Unst, Shetland has begun construction.

As with all other major infrastructure projects a full environmental impact assessment was undertaken and approved along with the environmental management controls it was deemed that the development would not have a negative impact on local air quality. To date no formal complaints pertaining to this development in relation to negative impact on local air quality have been logged with the local authority.

5 Planning Applications

Planning consultation extended for Yell windfarm, 2019/127/ECUCON | Application under section 36 of the Electricity Act 1989 for a Windfarm (with an installed capacity of up to 200MW). One of the main issues in need of resolution was due to an objection from Nature Scotland in relation to the destruction of peatlands necessary for this development. Though there is limited scope for fugitive emissions adversely affecting local air quality, there were concerns about CO₂ emissions due to peat disturbance and loss of natural blanket bog, these objections have been overcome and the planning process moves to the Scottish government for final oversight and approval.

2021/136/PPF | Install three wind turbines 67m high with associated works, including renovation of existing building to be used as control room | Culterfield Cunningsburgh Shetland ZE2 9HB. As with all other large scale wind developments, the construction and decommissioning phases of this development will be subject to controls detailed in an environmental management plan, this being designed to mitigate any adverse impacts including those which impact local air quality.

6 Conclusions and Proposed Actions

Conclusions from New Monitoring Data

Shetland Island Council does not currently conduct active or passive air quality monitoring. Historic monitoring data confirms that this local authority area does not have any exceedances and so this negates the need for further monitoring. Therefore, as no new data has been collected, no new AQMAs are being considered.

Conclusions relating to New Local Developments

As detailed in last year's report there are a number of ongoing large scale wind farm developments that have the potential to impact local air quality in the short term during the construction phases. These impacts should be mitigated by the implementation of effective construction environmental management plans together with ongoing compliance monitoring by Council officers and external auditors. Further to these current and planned developments, the slow recovery from COVID-19 impacting transport infrastructure within the islands will continue to reduce emissions in the medium term. This trend is planned to be supported and enhanced with current and future reductions in the use and reliance on fossil fuel for local transport and power generation, with the eventual generation of cleaner electricity by large wind farm developments currently under construction in the central mainland.

Proposed Actions

Shetland Islands Council's continues to work on its development strategies and internal efficiency and carbon reduction initiatives. It seeks to further develop the whole islands holistic view to achieving a net zero carbon economy. There will be ongoing monitoring of the identified activities in Table 2.2. This will enable feedback into the Council's efficiency savings process and to ensure that key performance indicators are being achieved. Initiatives will also be continually reviewed and refocussed, where necessary, so that the Council delivers on planned outcomes. Meanwhile, the Council has no plans to introduce any active monitoring of airborne pollutants at this time. Our next course of action will be to submit the next Annual Progress Report by June 2023.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within Shetland Islands Council During 2021

Shetland Islands Council has not identified any new sources relating to air quality within the reporting year of 2021

Additional Air Quality Works Undertaken by Shetland Islands Council During 2021

Shetland Islands Council has not completed any additional works within the reporting year of 2021.

Glossary of Terms

| Abbreviation | Description |
|-------------------|---|
| AQAP | Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the LA intends to achieve air quality limit values' |
| AQMA | Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives |
| APR | Air quality Annual Progress Report |
| AURN | Automatic Urban and Rural Network (UK air quality monitoring network) |
| Defra | Department for Environment, Food and Rural Affairs |
| DMRB | Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England |
| FDMS | Filter Dynamics Measurement System |
| LAQM | Local Air Quality Management |
| NO ₂ | Nitrogen Dioxide |
| NO _x | Nitrogen Oxides |
| PM ₁₀ | Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less |
| PM _{2.5} | Airborne particulate matter with an aerodynamic diameter of 2.5µm or less |
| QA/QC | Quality Assurance and Quality Control |
| SO ₂ | Sulphur Dioxide |

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<https://www.shetland.gov.uk/downloads/file/4785/main-issues-report-2022>
2. Shetland Islands Council, Local Development Plan 2, Strategic Environmental Assessment – Environmental Report
<https://www.shetland.gov.uk/downloads/file/4788/sic-ldp2-mir-sea-environmental-report>
3. CAA air passenger and air freight information access via the Civil Aviation Online web data files, web link for air passengers;
<https://www.caa.co.uk/Documents/Download/9115/8cce8a5d-a76b-4652-8fab-41ae2288f104/4665>
<https://www.caa.co.uk/Documents/Download/9115/8cce8a5d-a76b-4652-8fab-41ae2288f104/4649>