ITEM No ...5.....

REPORT TO: COMMUNITY SAFETY & PUBLIC PROTECTION COMMITTEE - 12 JUNE 2023

REPORT ON: AIR QUALITY UPDATE

REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES

REPORT NO: 152-2023

1.0 PURPOSE OF REPORT

1.1 To summarise 2022 air quality monitoring data results and progress made with Air Quality Action Plan measures; provide an update on air quality monitoring data for the early months of 2023; provide feedback on Lochee Road air quality modelling work; and to update on Dundee Low Emission Zone (LEZ) scheme workings.

2.0 RECOMMENDATIONS

- 2.1 It is recommended that Committee note the contents of this report and to:
 - Remit the Executive Director of Neighbourhood Services to continue to take forward the Council's Air Quality Action Plan (AQAP) measures during 2023, and submit the 2023 Air Quality Annual Progress Report to the statutory bodies;
 - 2. Note the information provided in Appendix 2 on provisional air quality monitoring data for the months of January to April 2023;
 - 3. Note the outcome of the detailed air quality modelling assessment of the preferred Option 2 proposal for Lochee Road as outlined in report 175-2021 to the 21 June 2021 City Development Committee; and
 - 4 Note the progress being made on awareness raising campaigns and enforcement infrastructure installation for the Dundee LEZ scheme in the lead up to enforcement commencing in May 2024.

3.0 FINANCIAL IMPLICATIONS

3.1 Costs associated with the progression of AQAP measures and Local Air Quality Management (LAQM) duties are contained within the grant funding allocated to the Council from the Scottish Government, as outlined in Section 4.9.

4.0 AIR QUALITY UPDATE

- 4.1 Reference is made to Article V of the Environmental Services and Sustainability Committee of 20th February 2006, when the original Committee Report approved the establishment of an Air Quality Management Area (AQMA) in the city and the basis of the necessary air quality monitoring and measures the Council requires to implement to work towards meeting the required air quality standards. As well as meeting the EU/UK National Air Quality Standards (NAQS), for the purposes of LAQM, local authorities in Scotland are also required to meet the more stringent statutory Scottish Objectives.
- 4.2 Of the seven NAQS pollutants, there continues to be no anticipated risk of exceeding the statutory objectives for benzene, carbon monoxide, 1,3-butadiene, sulphur dioxide and lead.
- 4.3 Through 2022, continuous monitoring for nitrogen dioxide (NO₂) took place at six locations in Dundee. These were at monitoring stations on Broughty Ferry Road, Lochee Road, Mains Loan (background reference monitor), Meadowside, the Seagate, and Whitehall Street. Continuous monitoring of Particulate Matter (PM) took place at 10 locations: Albert Street, Broughty Ferry Road, Lochee Road, Logie Street, Mains Loan (background reference monitor), Meadowside, Myrekirk Terrace, Seagate, Stannergate, and Whitehall Street.

- 4.4 The 2022 ratified monitoring data shows compliance was met for all air quality objectives at all of these monitoring locations. Details of this data is contained in Table 1 in **Appendix 1.** An annual summary report for Dundee City Council is also available on the Scottish Air Quality website at www.scottishairquality.scot/assets/reports/365/Dundee_City_annual_2022
- 4.5 Our 2021 and 2022 Annual Progress Reports advised that lockdown measures imposed in response to the COVID19 pandemic during 2020 resulted in a significant reduction in road traffic within Scotland's cities, including Dundee, which contributed to measured NO₂ concentrations decreasing significantly that year. In 2021, the recorded NO₂ annual mean concentrations increased slightly on the 2020 level, likely due to road traffic levels picking up. Monitoring data for 2022 reports that the NO₂ annual mean was lower than in 2020. A main contribution to this improvement would be the introduction of fully electric buses to the Dundee bus network in January 2022, in particular by XPlore Dundee on routes covering Lochee Road. 80% of the bus movements on the Lochee Road corridor involve the Xplore Dundee electric buses, with the other main operator, Stagecoach, running the cleanest LEZ compliant EUROVI vehicles on their routes.
- 4.6 The annual mean levels of PM¹⁰ and PM^{2.5} for 2022 were slightly increased on 2021 levels however remained compliant with the air quality objective levels. PM levels can be influenced by transboundary events with one such PM pollution episode occurring in late March 2022. Emissions blown in from continental Europe added to locally emitted pollutants (industrial, transport and agricultural) which were not dispersed due to warm, calm weather conditions, resulting in higher concentrations of PM¹⁰ being recorded at monitoring stations in Dundee.
- 4.7 Provisional data for the months of January April 2023 for NO₂, PM¹⁰ and PM^{2.5} is contained within **Tables 2 19** in **Appendix 2** of this report. And whilst this data has not yet been ratified, the monthly figures suggest likely compliance with annual mean objectives. This data has been sourced from the Scottish Air Quality Database, which is available through the Air Quality in Scotland website www.scottishairquality.scot.
- 4.8 The Council's Air Quality Action Plan (AQAP) includes a range of measures that continue to be progressed in order to achieve further improvements in air quality across the city. These measures are not focussed on specific locations but in combination contribute to improvements in air quality across the city. A summary of the progression of some of the AQAP related measures undertaken during 2022 and measures proposed to be progressed during 2023 are contained within **Appendix 3** of this report.
- 4.9 Funding to progress selected AQAP measures during 2023/24 has been obtained through the Scottish Government Air Quality Action Plan grant scheme, with £235,000.00 being awarded to Dundee City Council. Additional funding of £44,500.00 has been awarded to Dundee City Council through the Scottish Government Local Air Quality Management grant scheme for the maintenance of air quality monitoring equipment, the updating of our current Air Quality Action Plan and acquiring new communications equipment for our monitoring stations in preparation for the impending removal of 3G from communication networks.

5.0 LOCHEE ROAD MODELLING ASSESSMENT

- 5.1 Reference is made to article IV of the City Development Committee of 21 June 2021 where the Head of Sustainable Transport and Roads was remitted to commission a detailed air quality modelling assessment of the preferred Option 2 proposal for the Lochee Road corridor between the Dudhope Terrace and Polepark Road junctions outlined in report 175-2021. The council has worked with Scottish Environment Protection Agency (SEPA) to complete this air quality modelling.
- 5.2 The SEPA AQ modelling considered a two-step approach firstly with the removal of the tree barrier on the east side of the Lochee road and then with the proposed road layout improvement option 2 detailed in committee report 175-2021. The report concluded that the removal of the tree barrier (step 1) accounts for a reduction of annual mean NO₂ of around 3μg/m³ on Lochee Road between the junctions of Cleghorn Street and Dudhope Terrace. The reduction closer to the Lochee Road monitor is 1-2 μg/m³. However, it should be noted there are additional uncertainties associated with modelling the dispersion effects of a tree barrier.

5.3 The changes to road geometry (step 2) are predicted to decrease concentrations of annual mean NO₂ on the western side of Lochee Road due to the road source being a greater distance from the edge of the pavement. Near the Lochee Road automatic monitor this reduction is expected to be in the region of 3-4μg/m³. On the eastern side of Lochee Road there is a small increase of ~1.5μg/m³ due to the carriageway being moved slightly closer. This indicates that the combined road improvement works are estimated to decrease concentrations of NO₂ by 1-2μg/m³ along the section of Lochee Road north of the automatic monitor. Closer to the monitor the reduction is estimated to be greater, in the region of 4-6μg/m³. These changes mean that for the road improvement scenario there are no roadside points that exceed an annual mean of 30μg/m³. The limit value for NO₂ is 40μg/m³.

6.0 DUNDEE LOW EMISSION ZONE SCHEME UPDATE

- Reference is made to Article V of the Community Safety & Public Protection Committee of 21 February 2022 which approved the submission of an application to the Scottish Ministers for approval of the Dundee Low Emission Zone scheme as per Section 10 of Part 2 of the Transport (Scotland) Act 2019. Scottish Government Ministers approved the proposed scheme on 19 May 2022, with the scheme then introduced on 30 May 2022. Scottish Minister's approved a two-year grace period from enforcement following this date to allow those affected by the LEZ to prepare for the scheme.
- 6.2 The two-year grace period will allow for the necessary enforcement infrastructure to be installed, including the fibre optic cabling for the automatic number plate recognition (ANPR) cameras and connection of these to the back-office system. The fibre optic work has been completed while the ANPR cameras were installed in May 2023.
- 6.3 Preparations for the installation of approved LEZ signage have been ongoing, including meetings with Transport Scotland for their installation of advance warning signage on the trunk road network, including the Tay Road Bridge, the Kingsway and East Dock Street. Signage erection is scheduled to commence late summer 2023.
- A programme of communications to raise awareness of the Dundee LEZ scheme will continue during 2023 which will increasingly focus on enforcement of the scheme in the lead up to the date enforcement commences in May 2024. Recent ongoing activity includes a local television advert campaign running through the months of April, May and June 2023. The Council's website is being kept up-to-date with information on support funding available to help motorists prepare for the LEZ, while also containing weblinks to new tools available on the Low Emission Zones Scotland website. This includes the vehicle registration checker and the on-line registration system for the Blue Badge holder exemption scheme.

7.0 POLICY IMPLICATIONS

7.1 This report has been subject to an Integrated Impact Assessment to identify impacts on Equality & Diversity, Fairness & Poverty, Environment and Corporate Risk. An impact, positive or negative, on one or more of these issues was identified. An appropriate senior manager has checked and agreed with this assessment. A copy of the Integrated Impact Assessment showing the impacts and accompanying benefits of / mitigating factors for them is included as an Appendix to this report.

8.0 CONSULTATIONS

8.1 The Council Management Team were consulted in the preparation of this report and agree with its content.

9.0 BACKGROUND PAPERS

9.1 None

Elaine Zwirlein **Executive Director of Neighbourhood Services**

Tom Stirling **Head of Community Safety & Protection**

9 May 2023

APPENDICES

- Appendix 1 2022 ratified monitoring data results for each of the pollutants monitored at the continuous monitoring locations in Dundee against the Air Quality Objectives for Scotland
- Appendix 2 Provisional monitoring data for January April 2023 (monthly averages)
- Appendix 3 Content for the 2023 Air Quality Annual Progress Report on measures linked to the Air Quality Action Plan and actions to be progressed during 2023

Appendix 1: 2022 ratified monitoring data results for each of the pollutants monitored at the continuous monitoring locations in Dundee against the Air Quality Objectives for Scotland)

Table 1: Ratified monitoring data results for 2022 for continuous monitoring locations in Dundee City Council

Continuous Monitor location	Site type ^B	NO ₂ annual mean (ug/m³)	NO ₂ hourly mean (# times hourly 200ug/m³ limit exceeded)	annua	I I ₁₀ I mean ′m³)	PM ₁₀ daily mean (# times that 50ug/m³ daily mean exceeded)	annua	I 12.5 I mean /m³)
Air Quality Objective ^A		40	18	1	8	7	1	0
				measured correcte			measured	corrected ^D
Albert St ^(O)	K			measured corrected				
Broughty	UI	11.2	0		13.0	5	6.0	6.3
Ferry Rd ^C				(O)	-	-		
				(P)	-	-		
Lochee Rd	R	29.0	0	12.5	13.8	4	6.5	6.9
Logie St (O)	K					-		
Mains Loan	UB	9.1	0	8.9	9.8	2	5.2	5.5
Meadowside	R	26.1	0	12.0	13.2	5	5.8	6.1
Myrekirk Tce ^(O)	R					-		
Seagate	R	26.5	0	13.6	15.0	4	6.7	7.1]
Stannergate ^(O)	R					-		
Whitehall St	R	20.1	0	10.2	11.2	2	5.7	6.1

A. Air Quality Objectives (Scotland): NO_2 annual mean $-40ug/m^3$, NO_2 hourly $-200ug/m^3$ not to be exceeded more than 18 times per year, PM_{10} annual mean $-18ug/m^3$, PM_{10} daily mean $-50ug/m^3$ not to be exceeded more than 7 times per year, $PM_{2.5}$ annual mean $-10ug/m^3$

NOTE: full information on monitoring results in respect to type of analyser, % data capture, annualised results, and 99.8th percentiles will be available in Appendix 1 of the 2023 Air Quality Annual Progress Report for Dundee City Council.

B. Site type: K = kerbside, R = roadside, UI = urban industrial, UB = urban background, I = indicative

C. The Broughty Ferry Road site includes 3 analysers that monitor PM₁₀ (Fidas (F) / Osiris (O) / Partisol (P))

D. The Scottish Government published a guidance note on 17 May 2023* advising that annual mean PM data collected using Fidas 200 is to be corrected using factors (PM₁₀ divided by 0.909 and PM_{2.5} multiplied by 1.06) identified by the "Scottish Government Equivalence Study to Investigate Particulate Matter Monitoring In Scotland Using The Fidas 200". Local authorities are to present both measured and corrected data for LAQM reporting.

 $^{{\}color{red}^{\star}} \underline{www.scottishairquality.scot/news/local-authority-guidance-note-laqm-reporting-scottish-pm-data}$

Appendix 2: Provisional monitoring data for January – April 2023 (monthly averages)

All data in this appendix was sourced from the Scottish Air Quality database held on the Scottish Air Quality website, www.scottishairquality.scot on 1 May 2023.

Nitrogen dioxide (NO₂) monthly averages and annual mean

(Air Quality Objectives (Scotland): NO_2 annual mean – $40ug/m^3$) (N/D = no data) (= provisional data)

Table 2: Broughty Ferry Road NO2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	16.8	13.3	13.3	10.4									
2022	13.8	10.6	18.9	11.5	7.6	6.5	6.8	8.2	8.1	9.7	14.6	18.2	11.2
2021	27	N/D	N/D	N/D	N/D	12	8	8	11	13	14	19	13
2020	21	22	23	20	17	18	11	10	N/D	20	22	25	20
2019	31	30	19	28	22	18	15	18	19	21	25	27	23

Table 3: Lochee Road NO₂

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	41.9	33.4	30.2	22.4									
2022	39.2	34.2	36.2	24.6	22.4	18.4	19.2	22.0	24.7	27.6	35.4	44.1	29.0
2021	43	30	29	30	27	22	21	24	31	35	42	45	32
2020	47	46	35	17	15	19	22	24	32	36	40	42	31
2019	66	63	45	33	34	30	30	32	39	39	46	53	43

Table 4: Mains Loan NO₂ (background)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	10.8	8.3	9.0	4.9									
2022	8.9	7.8	13.9	6.7	N/D	N/D	N/D	N/D	5.0	6.4	11.5	12.7	9.1 (53%)
2021	13	9	8	8	7	5	5	7	8	9	10	14	8
2020	10	11	9	6	4	5	4	6	8	10	13	15	8
2019	19	15	9	12	8	7	6	7	8	11	16	15	11

Table 5: Meadowside NO₂

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	37.5	28.7	30.2	25.5									
2022	34.5	27.0	39.3	27.2	20.3	16.6	17.9	18.2	20.3	25.0	31.3	36	26.1
2021	N/D	N/D	25	27	26	19	19	21	27	32	34	42	27
2020	39	36	31	13	13	9	N/D	N/D	N/D	N/D	N/D	N/D	24
2019	48	48	33	32	29	24	26	27	28	32	34	41	34

Table 6: Seagate NO2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	35.4	29.9	31.2	26.1									
2022	28.6	25.7	35.0	27.3	19.9	19.2	14.4	24.8	20.0	25.0	32.3	35.7	26.5
2021	36	32	28	31	30	22	27	26	29	30	32	39	30
2020	40	41	33	18	13	17	20	26	29	33	34	37	28
2019	52	60	44	53	45	38	35	36	37	41	49	47	45

Table 7: Whitehall Street NO2

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
I	2023	26.4	21.9	25.2	22.1									
	2022	21.2	18.2	27.2	21.1	15.2	14.1	16.6	17.5	15.9	19.0	26.6	28.9	20.1
	2021	31	33	24	30	29	22	27	25	25	26	26	34	28
ſ	2020	28	30	26	13	13	11	18	24	24	31	28	33	24
ſ	2019	40	42	30	42	34	29	22	26	28	32	39	36	33

Particulate Matter (PM) 10 monthly averages and annual mean (Air Quality Objectives (Scotland): PM¹⁰ annual mean – 18ug/m³) (N/D = no data) (_____ = provisional data)

Table 8: Broughty Ferry Rd PM¹⁰

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	7.0	11.1	12.1	14.9									
2022	11.4	8.6	27.8	14.3	10.4	9.9	8.3	9.8	13.1	8.5	11.6	7.8	11.8
2021	6	10	11	14	9	11	12	11	12	7	7	N/D	10
2020	7	8	13	14	9	10	7	9	9	7	8	6	9
2019	10	20	12	28	11	11	12	15	13	10	11	10	14

Table 9: Lochee Road PM¹⁰

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	7.9	15.6	17.3	14.4									
2022	12.8	10.7	29	14.7	11.2	10.7	9.6	9.2	11.1	9.6	11.7	9.2	12.5
2021	8	11	12	15	9	10	14	11	11	8	9	12	11
2020	8	10	15	12	9	9	6	10	10	8	10	8	10
2019	13	18	15	22	9	9	10	9	9	9	10	9	12

Table 10: Mains Loan PM¹⁰ (background)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	5.4	8.3	7.4	12.3									
2022	7.7	5.9	20.7	10.6	8.5	8.4	6.4	7.2	7.9	7.3	9.8	6.5	8.9
2021	5	8	7	9	6	8	9	9	9	6	5	8	8
2020	6	6	8	11	7	8	5	7	7	6	8	6	7
2019	8	15	8	22	7	7	8	8	8	7	8	6	9

Table 11: Meadowside PM¹⁰

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	8.8	14.3	14.4	15.1									
2022	11.1	10.5	31.5	14.9	10.3	9.8	8.1	8.9	9.6	9.3	11.8	7.9	12.0
2021	6	11	15	14	8	10	11	11	11	8	8	10	10
2020	8	10	14	13	9	9	7	8	9	7	9	7	9
2019	16	27	18	27	9	10	10	9	10	8	12	8	14

Table 12: Seagate PM¹⁰

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	13.1	16.3	15.9	18.4									
2022	12.5	11.2	28.5	15.5	12.2	12.2	11.4	11.6	11.5	11.0	15.1	10.1	13.6
2021	7	11	12	15	10	11	12	13	12	9	9	11	11
2020	8	10	14	13	9	9	8	10	10	8	10	7	10
2019	14	21	15	29	11	11	11	11	11	10	12	9	14

Table 13: Whitehall Street PM¹⁰

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	6.7	10.7	10.7	14.5									
2022	8.9	7.3	22.1	11.9	9.1	8.9	7.4	8.4	9.4	9.4	11.5	7.6	10.2
2021	5	9	8	9	7	9	10	10	10	7	6	9	8
2020	7	8	10	11	8	9	6	8	8	7	8	6	8
2019	10	19	12	26	11	9	10	10	9	8	10	8	12

Particulate Matter (PM) 2.5 monthly averages and annual mean

(Air Quality Objectives (Scotland): PM^{2.5} annual mean – 10_{ug/m³}) (N/D = no data) (____ = provisional data)

Table 14: Broughty Ferry Road PM^{2.5}

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	3.9	5.6	4.7	8.0									
2022	5.2	3.8	15.2	6.9	4.8	4.9	3.6	4.4	7.1	4.3	6.5	4.5	6.0
2021	4	5	5	6	5	5	6	5	6	3	3	N/D	5
2020	4	4	5	7	5	5	3	4	4	3	5	3	4
2019	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D

Table 15: Lochee Road PM^{2.5}

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	4.4	6.4	5.7	8									
2022	6.2	4.7	16.5	7.7	5.6	5.8	4.8	4.6	5.2	4.7	6.8	5.3	6.5
2021	4	5	6	6	5	6	7	6	7	4	4	7	6
2020	4	5	6	7	5	5	2	6	5	4	6	5	5
2019	7	10	6	13	5	5	5	5	5	4	7	5	6

Table 16: Mains Loan PM^{2.5} (background)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	3.4	5.1	3.9	7.2									
2022	4.4	3.3	13.9	6.2	4.7	4.7	3.2	3.9	4.2	3.9	5.8	4	5.2
2021	3	5	5	5	4	5	6	5	5	3	3	5	4
2020	4	4	5	6	4	5	2	4	4	3	5	3	4
2019	5	10	5	14	4	4	5	5	4	4	5	4	6

Table 17: Meadowside PM^{2.5}

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	4.4	6.2	5.2	8.1									
2022	5.4	4.1	14.9	6.6	4.7	4.8	3.7	4.5	4.8	4.6	6.7	4.6	5.8
2021	4	5	7	6	5	5	7	5	6	4	4	6	5
2020	4	5	6	6	4	5	3	4	4	3	6	4	5
2019	N/D	N/D	7	15	4	5	5	5	5	4	7	5	6

Table 18: Seagate PM^{2.5}

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	5.8	6.7	5.9	8.8									
2022	6.4	4.9	15.6	7.4	5.6	5.7	4.8	5.4	5.5	5.6	7.8	5.7	6.7
2021	4	6	5	6	5	6	7	6	7	5	4	7	6
2020	5	5	6	7	5	5	3	5	5	4	6	4	5
2019	N/D	N/D	7	16	5	5	6	6	6	5	7	6	7

Table 19: Whitehall Street PM^{2.5}

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2023	4.0	5.9	5.0	8.1									
2022	5.1	3.9	13.9	6.5	4.9	4.9	3.7	4.5	4.8	4.9	6.5	4.7	5.7
2021	3	4	4	5	4	5	7	5	6	4	3	6	5
2020	4	4	5	6	4	5	3	4	4	4	5	4	4
2019	N/D	N/D	6	15	5	5	5	5	5	5	6	5	6

Appendix 3: Content for the proposed 2023 Air Quality Annual Progress Report on measures linked to the Air Quality Action Plan (AQAP) and proposed actions for 2023.

Dundee City Council has taken forward a number of measures linked to our AQAP during the current reporting year of 2022 in pursuit of improving local air quality.

Updates on AQAP related actions progressed during 2022 include:

- The Dundee Low Emission Zone scheme application was submitted to Scottish Ministers in February 2022 with approval given in May 2022. The Dundee LEZ scheme was then formally introduced on 30 May 2022. Enforcement of the scheme will not commence until the end of the two-year grace period in May 2024.
- There was an increase of 14 to the number of members to the Dundee ECO Stars larger commercial vehicles scheme, with this being 259 members at the end of 2022. This included the recruitment of the 250th member of the Dundee scheme, M&H Carriers. The number of vehicles included in the larger commercial vehicle scheme however rose by over 12% to 9476 vehicles. The number of members of the ECO Stars scheme for taxis/private hire vehicles was maintained at 18 operators (570 vehicles) during 2022.
- Dundee City Council has continued to use the platform of its Drive Dundee Electric campaign
 to successfully engage with current and potential electric vehicle (EV) owners (both in public
 and business) through the local media in the form of EV related articles encouraging people
 to make the switch to EV. These quarterly local media EV articles continues to encourage the
 taxi industry to switch to electric vehicles. In 2022 Dundee City Council deployed a series fully
 accessibility EV charging infrastructure trials as part of an innovation pilot project. In October
 2022 Dundee City Council hosted the HEVTCP bi-annual international conference in
 partnership with OZEV.
- The Dundee City Council Fleet section continued to replace older vehicles with newer, less polluting models. During 2022, 36 older diesel vehicles were replaced with electric vehicles. By the end of 2022, there was a total of 207 fully electric vehicles within the council fleet.
- At the end of 2022 there were 181 pure electric taxis in Dundee, up from 165 in 2021.
- To support the modelling of the air quality impacts of the preferred option for possible adjustments to the Lochee Road corridor, traffic counts were undertaken in March 2022. The report on the impacts on air quality of the preferred option was completed by SEPA in late 2022.
- Road infrastructure changes on Lochee Road at the Cleghorn Street / Rankine Street were implemented in 2022 to benefit road safety and to help ease congestion caused by vehicles turning right into these streets from Lochee Road.
- 'Clean Air Day 2022' was promoted via social media channels on June 17 to help raise awareness of air quality and how we can protect those most vulnerable to the impacts of exposure to poor air quality.
- A project to provide residential cycle storage solutions in areas of Dundee where there is a
 high level of flatted development and tenements was approved and following a procurement
 exercise, a contract was awarded to Cyclehoop to deliver 40 cycle storage shelters. The first
 of the 'Cycle-hoop' cycle storage units are due to be installed in early 2023.
- Additional School Streets (vehicle exclusion zone) projects were introduced at five sites (seven schools) in Autumn 2022. Planning began for the next batch of schools to see the introduction of School Streets in 2023.
- A number of Places for Everyone projects were continued throughout Dundee with funding secured to move to their next stages of delivery in Broughty Ferry, Union Street, East End Campus and Ninewells.

Air Quality Action Plan linked measures to be progressed over the course of the next reporting year include:

- A further 28 fully electric vehicles will be introduced to the DCC fleet by the end of July 2023, increasing the number of EV in the corporate fleet to 235, which represents 35% of the corporate fleet vehicles.
- The Staff Travel Plan is due to be launched in 2023 and will include dedicated pages set up on the Council's intranet providing information on staff travel measures.
- The 'Cycle-hoop' cycle storage units are due to be installed in early 2023, with all 40 sites to the installed during 2023.
- New electric vehicle charging infrastructure will continue to be deployed across Dundee, including Corporate Fleet department infrastructure at our Clepington Road depot being completed by May 2023. This deployment will facilitate an acceleration of DCC transition to emobility.
- Continuation of both ECOSTARS Schemes for Heavy Duty Vehicles and Taxis / Private Hire
 vehicles to encourage engagement with and participation of these transport providers in the
 achievement of air quality improvements in the city.
- Continued support for Active Travel related projects including the delivery of the School Active
 Travel Delivery programme and behaviour change campaigns to cycling, active and sustainable
 travel across the city via joint working with the Dundee Cycle Hub. The School Active Travel
 Team have been shortlisted for the 'Best Practice in Travel to School and Work Schemes'
 category of the 2023 Scottish Transport Awards.
- The promotion of Clean Air Day on 15 June 2023 to help raise awareness of air quality. This year's theme is "Clean up our air to look after your mind this #CleanAirDay."
- Progression will be made with the review and updating of the existing 2011 Dundee City Council Air Quality Action Plan. This will be in line the new Local Air Quality Management Policy Guidance PG(S)(23) published in March 2023, and the Scottish Government's 2021 'Cleaner Air for Scotland 2 – Towards a better Place for Everyone' air quality strategy.



Integrated Impact Assessment

Committee Report Number: 152-2023

Document Title: Air Quality Update

Document Type: Other

Description:

The purpose of the report is to summarise 2022 air quality monitoring data results and progress made with Air Quality Action Plan measures; provide an update on air quality monitoring data for the early months of 2023; provide feedback on Lochee Road air quality modelling work; and to update on Dundee Low Emission Zone (LEZ) scheme workings.

Intended Outcome:

The intended outcome is for Committee to note the contents of the report and to (1) Remit the Executive Director of Neighbourhood Services to continue to take forward the Council's Air Quality Action Plan (AQAP) measures during 2023, and submit the 2023 Air Quality Annual Progress Report to the statutory bodies; (2) note the information provided on provisional air quality monitoring data for the months of January to April 2023; (3) note the outcome of the detailed air quality modelling assessment of the preferred Option 2 proposal for Lochee Road as outlined in report 175-2021 to the 21 June 2021 City Development Committee; and (4) note the progress being made on awareness raising campaigns and enforcement infrastructure installation for the Dundee LEZ scheme in the lead up to enforcement commencing in May 2024.

Period Covered: 12/06/2023 to 10/06/2024

Monitoring:

Further annual report to be submitted in 2024

Lead Author:

Jamie Landwehr, Environment / Public Health Manager, Neighbourhood Services,

jamie.landwehr@dundeecity.gov.uk, 01382436280,

5 City Square, Dundee DD1 3BA

Director Responsible:

Elaine Zwirlein, Executive Director Neighbourhood Services, Neighbourhood Services

 $elaine.zwirlein@dundeecity.gov.uk,\,01382434538$

5 City Square, Dundee DD1 3BA

Equality, Diversity and Human Rights

Impacts & Implications

Age: No Impact

Disability: No Impact

Gender Reassignment: No Impact

Marriage & Civil Partnership: No Impact

Pregnancy & Maternity: No Impact

Race / Ethnicity: No Impact

Religion or Belief: No Impact

Sex: No Impact

Sexual Orientation: No Impact

Are any Human Rights not covered by the Equalities questions above impacted by this report?

No

Fairness & Poverty Geographic Impacts & Implications

Strathmartine: No Impact Lochee: No impact Coldside: No Impact Maryfield: No Impact North East: No Impact East End: No Impact The Ferry: No Impact West End: No Impact

Household Group Impacts and Implications

Looked After Children & Care Leavers: No Impact

Carers: No Impact

Lone Parent Families: No Impact

Single Female Households with Children: No Impact

Greater number of children and/or young children: No Impact

Household Group Impacts and Implications

Pensioners - single / couple: No Impact

Unskilled workers or unemployed: No Impact

Serious & enduring mental health problems: No Impact

Homeless: No Impact

Drug and/or alcohol problems: No Impact

Offenders & Ex-offenders: No Impact

Socio Economic Disadvantage Impacts & Implications

Employment Status: No Impact

Education & Skills: No Impact

Income: No Impact

Caring Responsibilities (including Childcare): No Impact

Affordability and accessibility of services: No Impact

Fuel Poverty: No Impact

Cost of Living / Poverty Premium: No Impact

Connectivity / Internet Access: No Impact

Income / Benefit Advice / Income Maximisation No Impact

Employment Opportunities: No Impact

Education: No Impact

Health: No Impact

Life Expectancy: No Impact

Mental Health: No Impact

Overweight / Obesity: No Impact

Child Health: No Impact

Neighbourhood Satisfaction: No Impact

Transport: No Impact

Environment

Climate Change Impacts

Mitigating Greenhouse Gases: Positive

Supports measures to increase active and sustainable travel.

Adapting to the effects of climate change: No Impact

Resource Use Impacts

Energy efficiency & consumption: No Impact

Prevention, reduction, re-use, recovery or recycling of waste: No Impact

Sustainable Procurement: No Impact

Transport Impacts

Accessible transport provision: No Impact

Sustainable modes of transport: Positive

Supports measures to increase active and sustainable travel.

Natural Environment Impacts

Air, land & water quality: Positive

Supports measures to improve air quality in Dundee.

Biodiversity: No Impact

Open & green spaces: No Impact

Built Environment Impacts

Built Heritage: No Impact

Housing: No Impact

Is the proposal subject to a Strategic Environmental Assessment (SEA)?

No further action is required as it does not qualify as a Plan, Programme or Strategy as defined by the Environment Assessment (Scotland) Act 2005.

Corporate Risk

Corporate Risk Impacts

Political Reputational Risk: No Impact

Economic/Financial Sustainability / Security & Equipment: No Impact

Social Impact / Safety of Staff & Clients: No Impact

Technological / Business or Service Interruption: No Impact

Environmental: Positive

Supports measures to improve air quality and climate change.

Legal / Statutory Obligations: No Impact

Organisational / Staffing & Competence: No Impact

Corporate Risk Implications & Mitigation:

The risk implications associated with the subject matter of this report are "business as normal" risks and any increase to the level of risk to the Council is minimal. This is due either to the risk being inherently low or as a result of the risk being transferred in full or in part to another party on a fair and equitable basis. The subject matter is routine and has happened many times before without significant impact.