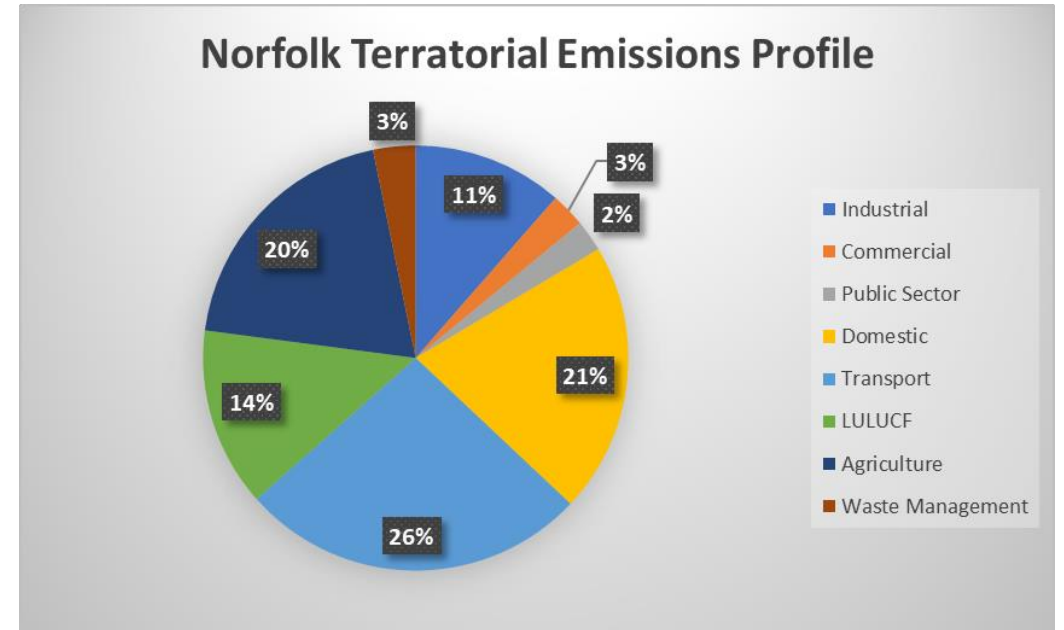
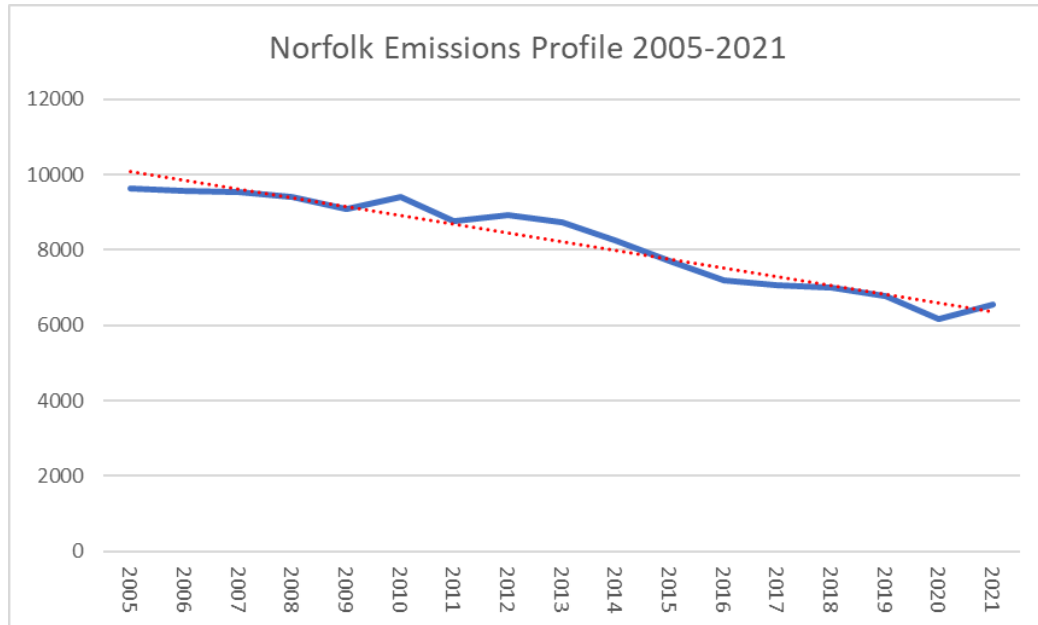


2021 Norfolk Territorial Emissions

Published 2023

Data is published by DESNZ with a 2-year lag



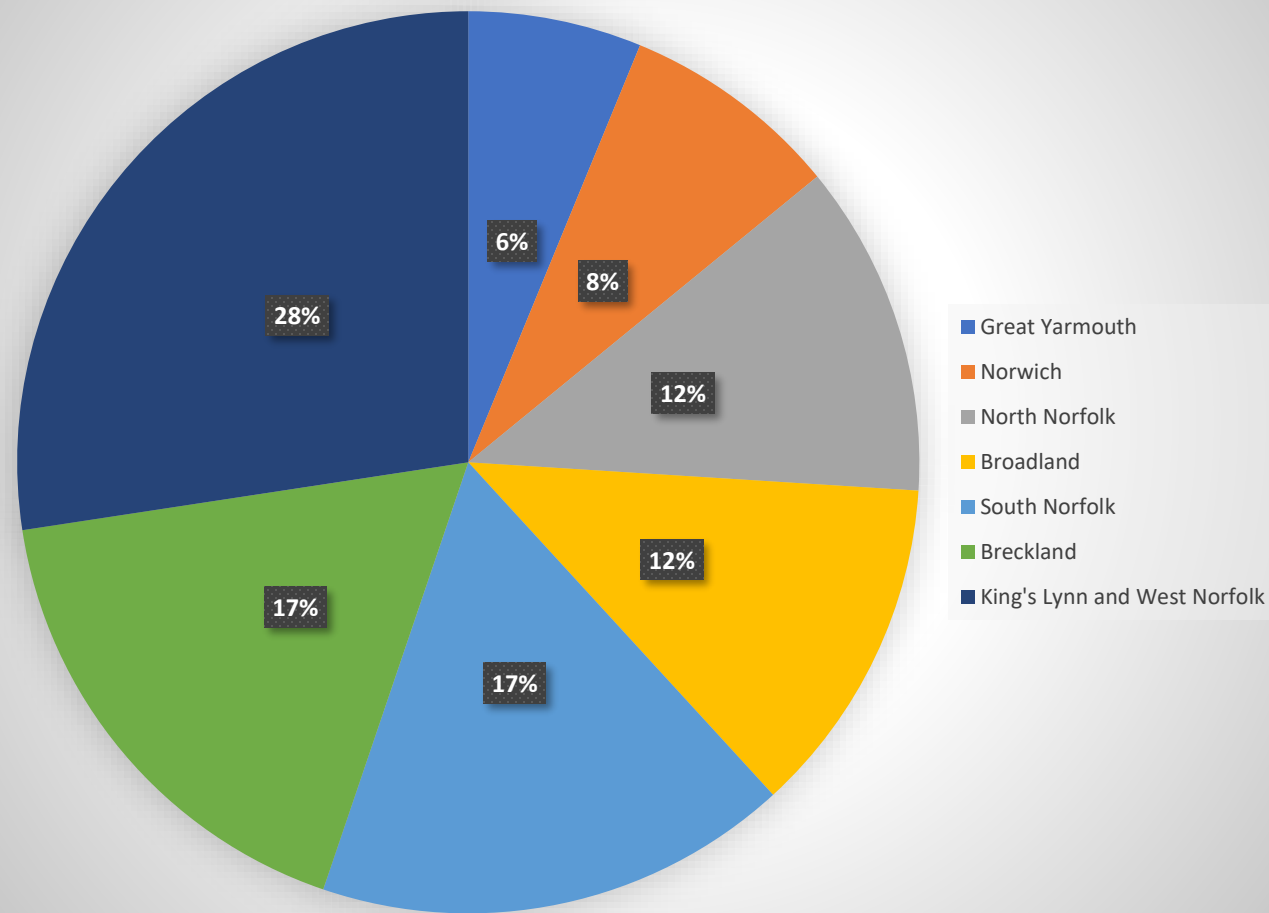
Year	2019	2020	2021	% change from 2020	% change from 2019
Total Emission	6765	6176	6569	6.36%	-2.90%
Industrial	767	723	751.1	3.89%	-2.07%
Commercial	180	147	172.3	17.21%	-4.28%
Public Sector	143	127	156.6	23.31%	9.51%
Domestic	1334	1320	1352.4	2.45%	1.38%
Transport	1981	1599	1736.2	8.58%	-12.36%
LULUCF	889	891	894.8	0.43%	0.65%
Agriculture	1291	1228	1293.4	5.33%	0.19%
Waste Management	180	140	212.1	51.50%	17.83%

Overall Emissions Profile

- Overall emissions have increased by 6.36% compared to 2020 but this is heavily influenced by pandemic restrictions reducing emissions levels.
- Better understanding by comparing to 2019 figures which shows a reduction of 2.9%. This is similar to the national picture of a re-basing to slightly lower than pre-pandemic emissions levels.
- However, some areas have increased from pre-pandemic levels.
- Largest emission reduction is in transport figures which saw a 244.8 kt CO₂e reduction compared to 2019 figures.

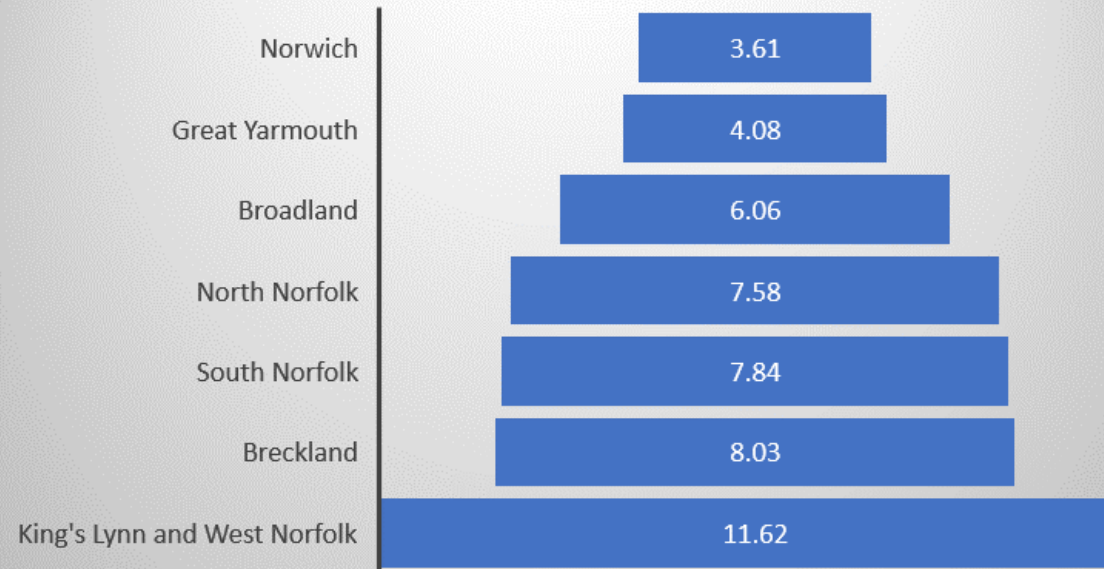
District contributions to overall Norfolk territorial emissions

Norfolk Territorial Emissions (tCo2e)

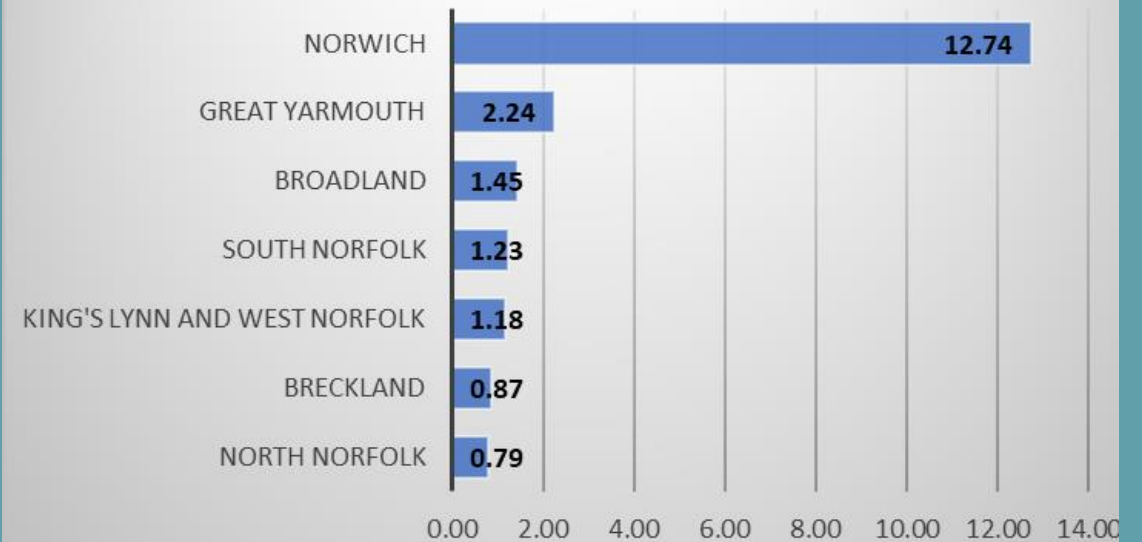


Emission per capita & KM2

Emissions/kt CO2e per Capita



Emissions/kt Co2e per KM2



Position in the United Kingdom: Total Emissions				
Out of 374 Councils, 1 = lowest emitter 374 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	UK Ranking Total emissions	Percentile
Great Yarmouth	Urban with Significant Rural	408.52	30	Lowest 10% of Emitters
Norwich	Predominantly Urban	516.49	65	Lowest 20% of Emitters
North Norfolk	Predominantly Rural	782.94	162	Lowest 50% of Emitters
Broadland	Urban with Significant Rural	800.77	164	Lowest 50% of Emitters
South Norfolk	Predominantly Rural	1118.10	249	Highest 40% of Emitters
Breckland	Predominantly Rural	1141.93	256	Highest 40% of Emitters
King's Lynn and West Norfolk	Predominantly Rural	1800.24	332	Highest 12% of Emitters

Position in the England: Total Emissions				
Out of 309 Councils, 1 = lowest emitter 309 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Total emissions	Percentile
Great Yarmouth	Urban with Significant Rural	408.52	24	Lowest 10% of Emitters
Norwich	Predominantly Urban	516.49	54	Lowest 20% of Emitters
North Norfolk	Predominantly Rural	782.94	146	Lowest 50% of Emitters
Broadland	Urban with Significant Rural	800.77	148	Lowest 50% of Emitters
South Norfolk	Predominantly Rural	1118.10	221	Highest 30% of Emitters
Breckland	Predominantly Rural	1141.93	227	Highest 30% of Emitters
King's Lynn and West Norfolk	Predominantly Rural	1800.24	283	Highest 9% of Emitters

Position in the East of England: Total Emissions				
Out of 45 Councils, 1 = lowest emitter 45 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	East of England Ranking Total emissions	Percentile
Great Yarmouth	Urban with Significant Rural	408.52	6	Lowest 20% of Emitters
Norwich	Predominantly Urban	516.49	10	Lowest 30% of Emitters
North Norfolk	Predominantly Rural	782.94	25	Highest 50% of Emitters
Broadland	Urban with Significant Rural	800.77	26	Highest 50% of Emitters
South Norfolk	Predominantly Rural	1118.10	35	Highest 30% of Emitters
Breckland	Predominantly Rural	1141.93	36	Highest 30% of Emitters
King's Lynn and West Norfolk	Predominantly Rural	1800.24	44	Highest 3% of Emitters

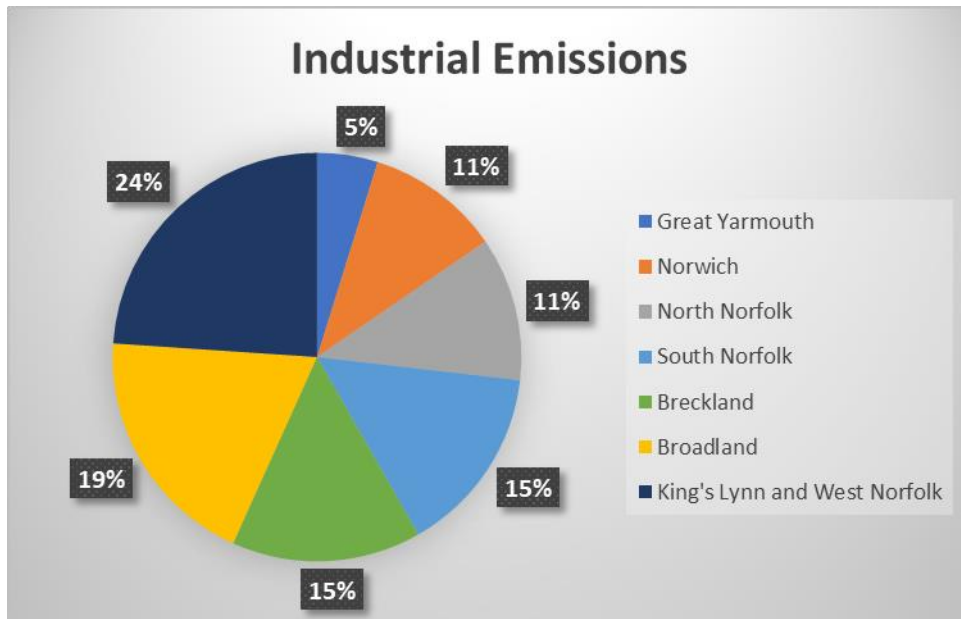
How does Norfolk compare in the UK, England & regionally

Position in the England: Industrial Emissions

Out of 309 Councils, 1 = lowest emitter 309 = highest emitter

Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Industrial Emissions	Percentile
Great Yarmouth	Urban with Significant Rural	36.13	28	Lowest 10% of Emitters
Norwich	Urban with City and Town	79.77	109	Lowest 40% of Emitters
North Norfolk	Mainly Rural	85.46	120	Lowest 40% of Emitters
South Norfolk	Mainly Rural	112.21	152	Lowest 50% of Emitters
Breckland	Mainly Rural	112.58	154	Lowest 50% of Emitters
Broadland	Urban with Significant Rural	145.21	193	Highest 40% of Emitters
King's Lynn and West Norfolk	Largely Rural	179.74	221	Highest 30% of Emitters

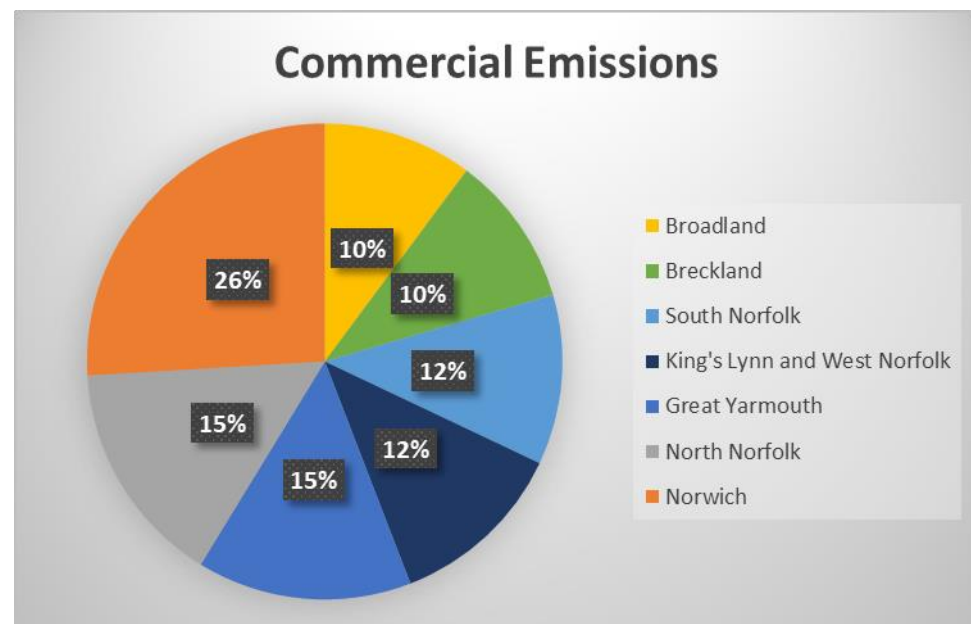
Industrial Emissions



- Overall return to close to pre-pandemic emission levels, 2% reduction or 15.9 kt CO₂e
- Overall accounts for 11% of Norfolk's emissions profile
- South Norfolk, Breckland, Broadland & King's Lynn larger contributors to county emissions profile
- Majority of district areas benchmarking in bottom 50% of emitters in England

Position in the England: Commercial Emissions				
Out of 309 Councils, 1 = lowest emitter 309 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Commercial Emissions	Percentile
Broadland	Urban with Significant Rural	17.53	61	Lowest 20% of Emitters
Breckland	Mainly Rural	17.76	63	Lowest 30% of Emitters
South Norfolk	Mainly Rural	19.90	76	Lowest 30% of Emitters
King's Lynn and West Norfolk	Largely Rural	20.86	87	Lowest 30% of Emitters
Great Yarmouth	Urban with Significant Rural	25.17	110	Lowest 40% of Emitters
North Norfolk	Mainly Rural	26.39	117	Lowest 40% of Emitters
Norwich	Urban with City and Town	44.70	195	Highest 40% of Emitters

Commercial Emissions

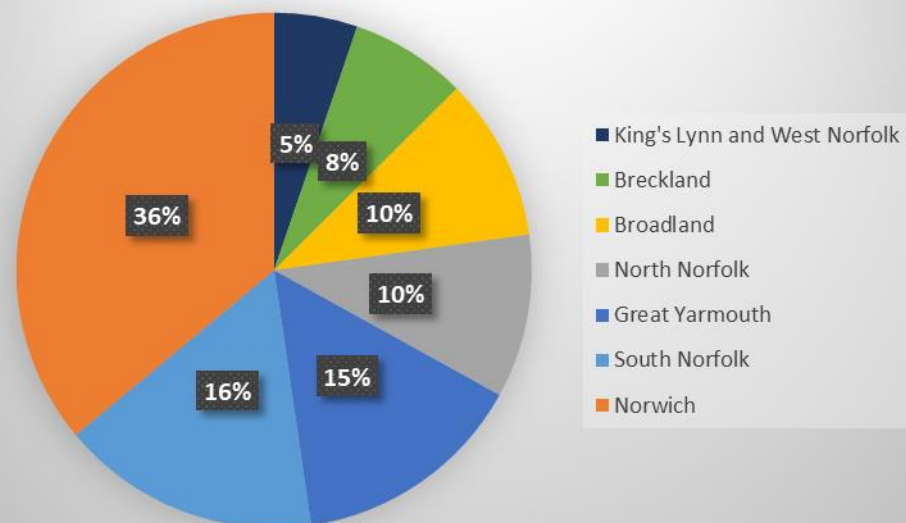


- Overall return to close to pre-pandemic emission levels, 4% reduction or 7.7 kt CO₂e
- Overall accounts for 3% of Norfolk's emissions profile
- Norwich higher than other due to greater concentration of retail premises in its area
- Majority of district areas benchmarking in bottom 50% of emitters in England

Public Sector Emissions

Position in the England: Public Sector Emissions				
Out of 309 Councils, 1 = lowest emitter 309 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Public Sector Emissions	Percentile
King's Lynn and West Norfolk	Largely Rural	8.20	19	Lowest 10% of Emitters
Breckland	Mainly Rural	11.44	39	Lowest 20% of Emitters
Broadland	Urban with Significant Rural	16.02	74	Lowest 30% of Emitters
North Norfolk	Mainly Rural	16.09	75	Lowest 30% of Emitters
Great Yarmouth	Urban with Significant Rural	22.95	114	Lowest 40% of Emitters
South Norfolk	Mainly Rural	25.48	130	Lowest 50% of Emitters
Norwich	Urban with City and Town	56.43	245	Highest 30% of Emitters

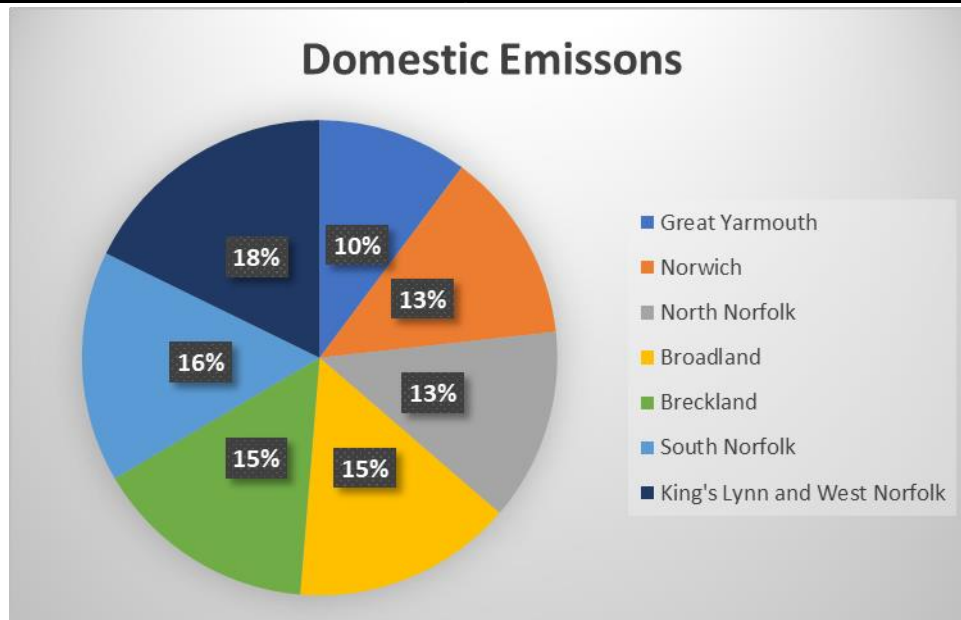
Public Sector Emissions



- Increased to higher than pre-pandemic emission levels, 9.5% increase or 13.6 kt CO₂e
- Overall accounts for 2% of Norfolk's emissions profile
- Norwich significantly higher – is this due to higher concentration of public sector buildings, e.g councils, hospital, university?
- Majority of district areas benchmarking in bottom 50% of emitters in England

Domestic Emissions

Position in the England: Domestic Emissions				
Out of 309 Councils, 1 = lowest emitter 309 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Domestic Emissions	Percentile
Great Yarmouth	Urban with Significant Rural	138.12	49	Lowest 20% of Emitters
Norwich	Urban with City and Town	176.45	113	Lowest 40% of Emitters
North Norfolk	Mainly Rural	176.72	114	Lowest 40% of Emitters
Broadland	Urban with Significant Rural	202.58	145	Lowest 50% of Emitters
Breckland	Mainly Rural	205.72	148	Lowest 50% of Emitters
South Norfolk	Mainly Rural	212.66	159	Highest 50% of Emitters
King's Lynn and West Norfolk	Largely Rural	240.17	187	Highest 40% of Emitters



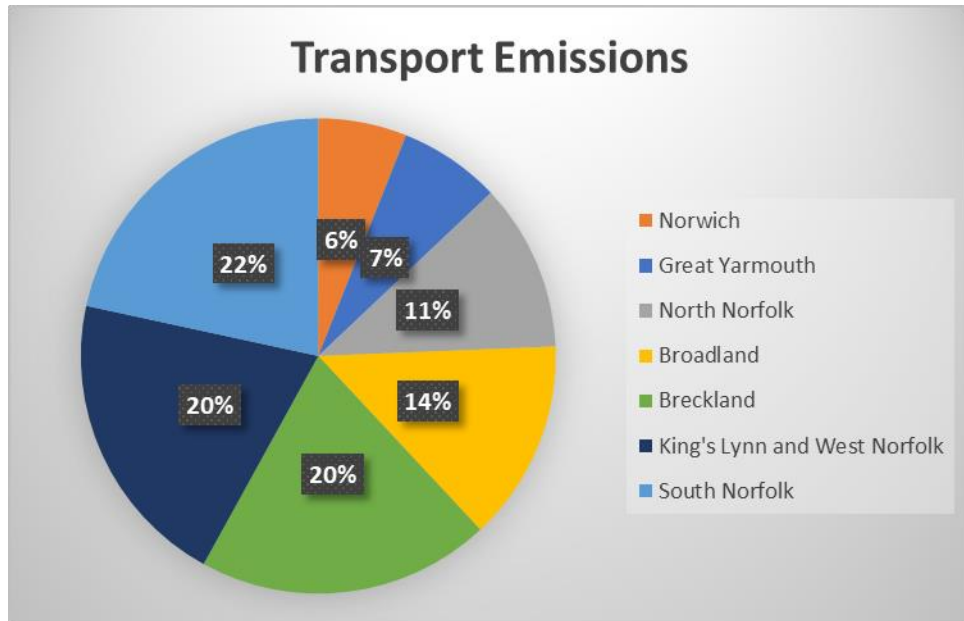
- Increased to higher than pre-pandemic emission levels, 1.3% increase or 18.4 kt CO₂e
- Overall accounts for 21% of Norfolk's emissions profile, 2nd largest emission source
- South Norfolk, Breckland, Broadland & King's Lynn larger contributors to county emissions profile – is this because of a high concentration of off gas communities?
- Majority of district areas benchmarking in bottom 50% of emitters in England

Position in the England: Transport Emissions

Out of 309 Councils, 1 = lowest emitter 309 = highest emitter

Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Transport Emissions	Percentile
Norwich	Urban with City and Town	104.69	28	Lowest 10% of Emitters
Great Yarmouth	Urban with Significant Rural	120.22	46	Lowest 20% of Emitters
North Norfolk	Mainly Rural	198.04	103	Lowest 40% of Emitters
Broadland	Urban with Significant Rural	237.61	136	Lowest 50% of Emitters
Breckland	Mainly Rural	346.80	214	Highest 40% of Emitters
King's Lynn and West Norfolk	Largely Rural	353.67	215	Highest 40% of Emitters
South Norfolk	Mainly Rural	375.20	231	Highest 30% of Emitters

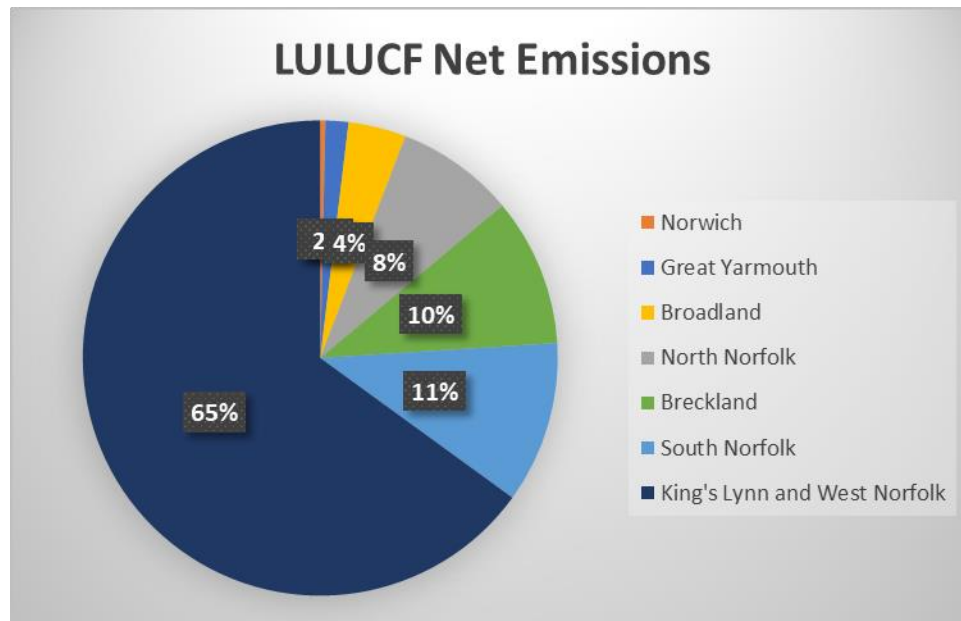
Transport Emissions



- Significant reduction compared to pre-pandemic emission levels, 4% reduction or 244.8 kt CO₂e – is this the impact of more homeworking?
- Overall accounts for 26% of Norfolk's emissions profile, largest emission source in the county
- South Norfolk, Breckland & King's Lynn larger contributors to county emissions profile – is this because of due to A11/A47?
- Three district areas in the highest 40% of emitters in England for Transport

Land Use, Land Use Change & Forestry Emissions

Position in the England: LULUCF Emissions				
Out of 309 Councils, 1 = lowest emitter 309 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking LULUCF Emissions	Percentile
Norwich	Urban with City and Town	3.10	249	Highest 20% of Emitters
Great Yarmouth	Urban with Significant Rural	13.99	273	Highest 12% of Emitters
Broadland	Urban with Significant Rural	35.21	284	Highest 9% of Emitters
North Norfolk	Mainly Rural	72.17	290	Highest 7% of Emitters
Breckland	Mainly Rural	90.26	295	Highest 5% of Emitters
South Norfolk	Mainly Rural	98.40	297	Highest 4% of Emitters
King's Lynn and West Norfolk	Largely Rural	581.64	308	Highest 1% of Emitters

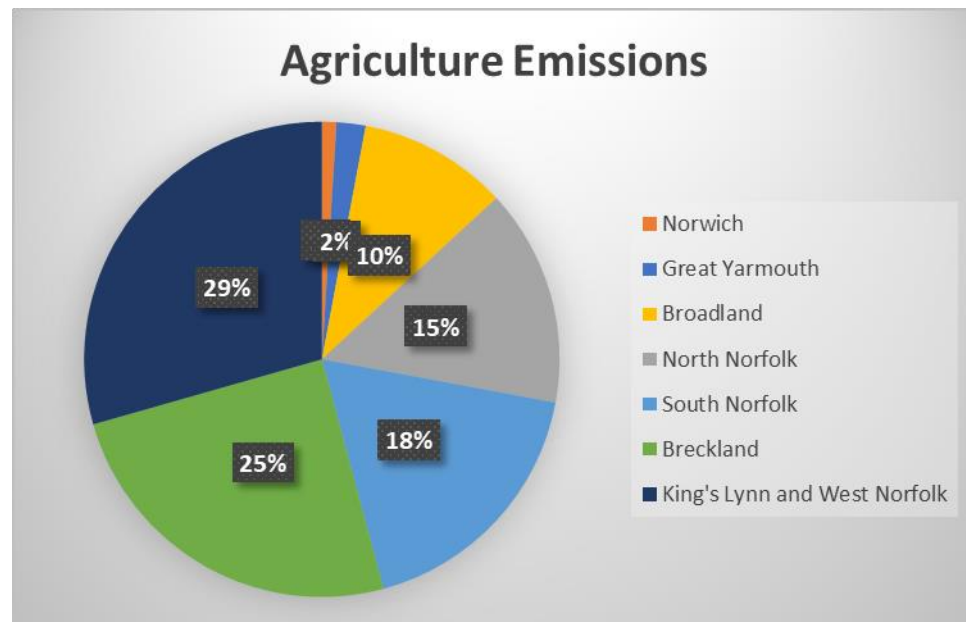


- Small increase to higher than pre-pandemic emission levels, 0.65% increase or 5.8 kt CO₂e
- Overall accounts for 14% of Norfolk's emissions profile,
- King's Lynn significantly larger than all others, second highest in England
- Five of district areas are in top 10% highest emitter in England and all are in top 25%
- Government Land use framework has been delayed; UK Climate Change commission identified this as a concern

Agriculture Emissions

Position in the England: Agriculture Emissions				
Out of 309 Councils, 1 = lowest emitter 309 = highest emitter				
Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Agriculture Emissions	Percentile
Norwich	Urban with City and Town	12.71	113	Lowest 40% of Emitters
Great Yarmouth	Urban with Significant Rural	25.64	142	Lowest 50% of Emitters
Broadland	Urban with Significant Rural	131.42	240	Highest 30% of Emitters
North Norfolk	Mainly Rural	191.22	262	Highest 20% of Emitters
South Norfolk	Mainly Rural	231.74	268	Highest 20% of Emitters
Breckland	Mainly Rural	320.23	282	Highest 9% of Emitters
King's Lynn and West Norfolk	Largely Rural	380.43	290	Highest 7% of Emitters

- Small increase to higher than pre-pandemic emission levels, 0.19% increase or 2.4 kt CO₂e
- Overall accounts for 20% of Norfolk's emissions profile, 3rd largest emission source in the county
- Five districts in the top 30% of emitters in England, with Breckland and King's Lynn & West Norfolk being in the top 10% of emitters



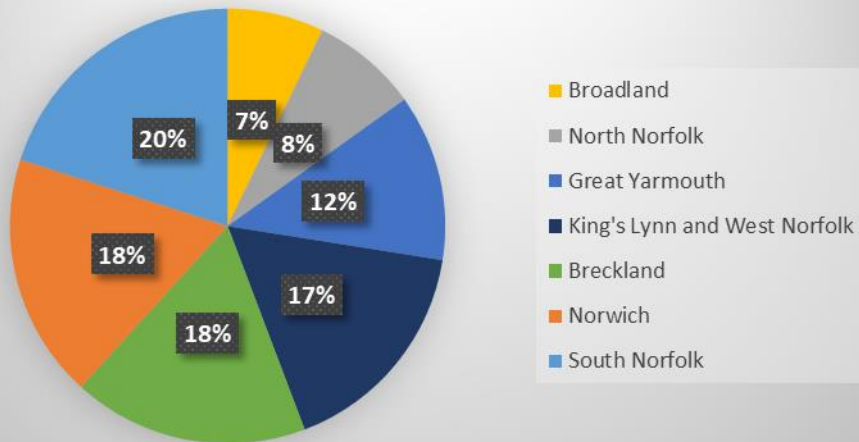
Position in the England: Waste Management Emissions

Out of 309 Councils, 1 = lowest emitter 309 = highest emitter

Local Authority	Rural Urban Classification 2011 (3 fold)	ktCo2e	England Ranking Waste Management Emissions	Percentile
Broadland	Urban with Significant Rural	15.19	64	Lowest 30% of Emitters
North Norfolk	Mainly Rural	16.83	72	Lowest 30% of Emitters
Great Yarmouth	Urban with Significant Rural	26.30	121	Lowest 40% of Emitters
King's Lynn and West Norfolk	Largely Rural	35.52	158	Highest 50% of Emitters
Breckland	Mainly Rural	37.14	165	Highest 50% of Emitters
Norwich	Urban with City and Town	38.62	176	Highest 50% of Emitters
South Norfolk	Mainly Rural	42.51	192	Highest 40% of Emitters

Waste Management Emissions

Waste Management Emissions



- Significant increase compared to pre-pandemic emission levels, 17.8% reduction or 32.1 kt CO₂e
- Overall accounts for 3% of Norfolk's emissions profile
- This is mainly relating to estimated methane emissions from waste going to landfill and attributed back to its source authority (taken from government returns)
- Four district areas in the highest 50% of emitters in England



Our partners include:

