King's Lynn and West Norfolk District CO_2 Emissions Report, 2018-2019

Environment and Community Panel, Feb 2022

Borough Council of
King's Lynn &
West Norfolk

Overview

- Annually, the Department of Business, Energy, and Industrial Strategy (BEIS) publishes local authority area CO_2 emissions statistics. The 2019 data set contains the most recent published local authority area estimates as of September 2021.

- Emissions are distributed to points of consumption rather than points of generation (such as power stations).

- CO_2 emissions are split into six sectors: industry, commercial, public sector, domestic, transport and land use, land use change and forestry (LULUCF).

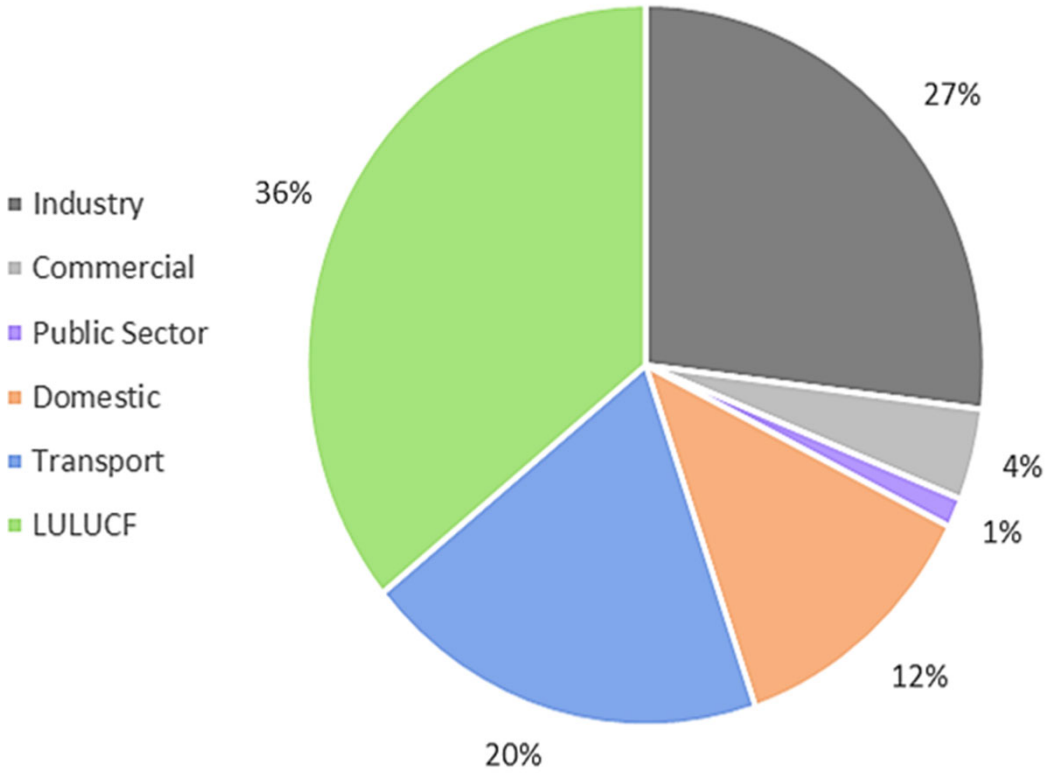
- King's Lynn and West Norfolk emitted 1,906.8 kilo tonnes (kt) of CO_2 in 2019 with LULUCF emitting the most (683.8 kt CO2) and the public sector emitting the least (25.2 kt CO2).

- King's Lynn and West Norfolk is the largest contributor to Norfolk's CO_2 emissions, accounting for 33.1%.

- Total CO_2 emissions in 2019 have decreased from 2018 levels by 3.2% and are currently the second lowest levels on record for King's Lynn and West Norfolk.

Borough Council of
King's Lynn &
West Norfolk

King's Lynn and West Norfolk 2019 CO_2 District Profile

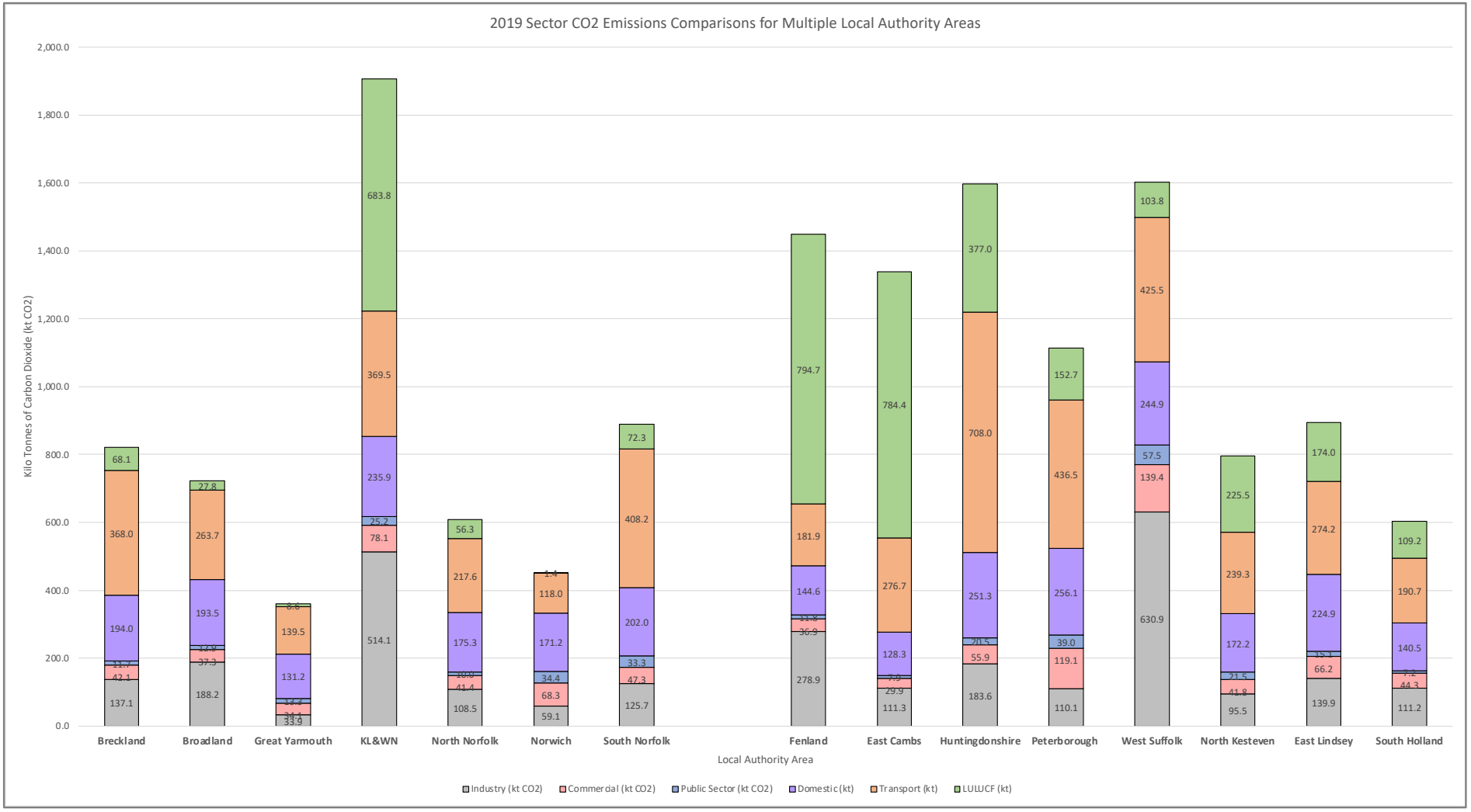


1. LULUCF: 683.8 kt CO_2
2. Industry: 514.1 kt CO_2
3. Transport: 369.5 kt CO_2
4. Domestic: 235.9 kt CO_2
5. Commercial: 78.1 kt CO_2
6. Public Sector: 25.2 kt CO_2

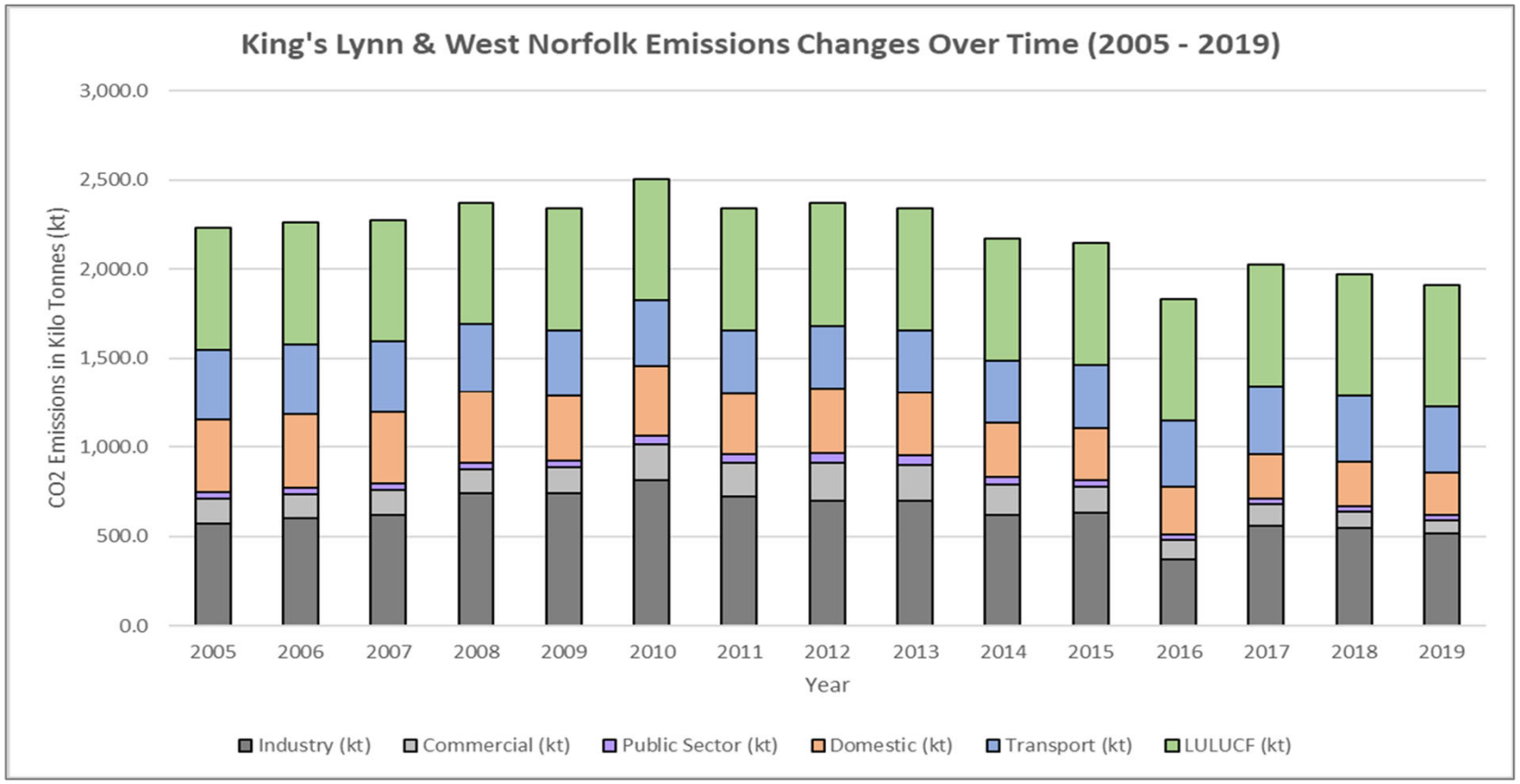
Figure 1: 2019 percentage sector contribution to district CO_2 emissions.

Borough Council of
King's Lynn &
West Norfolk

Norfolk Emissions Comparisons: 2019



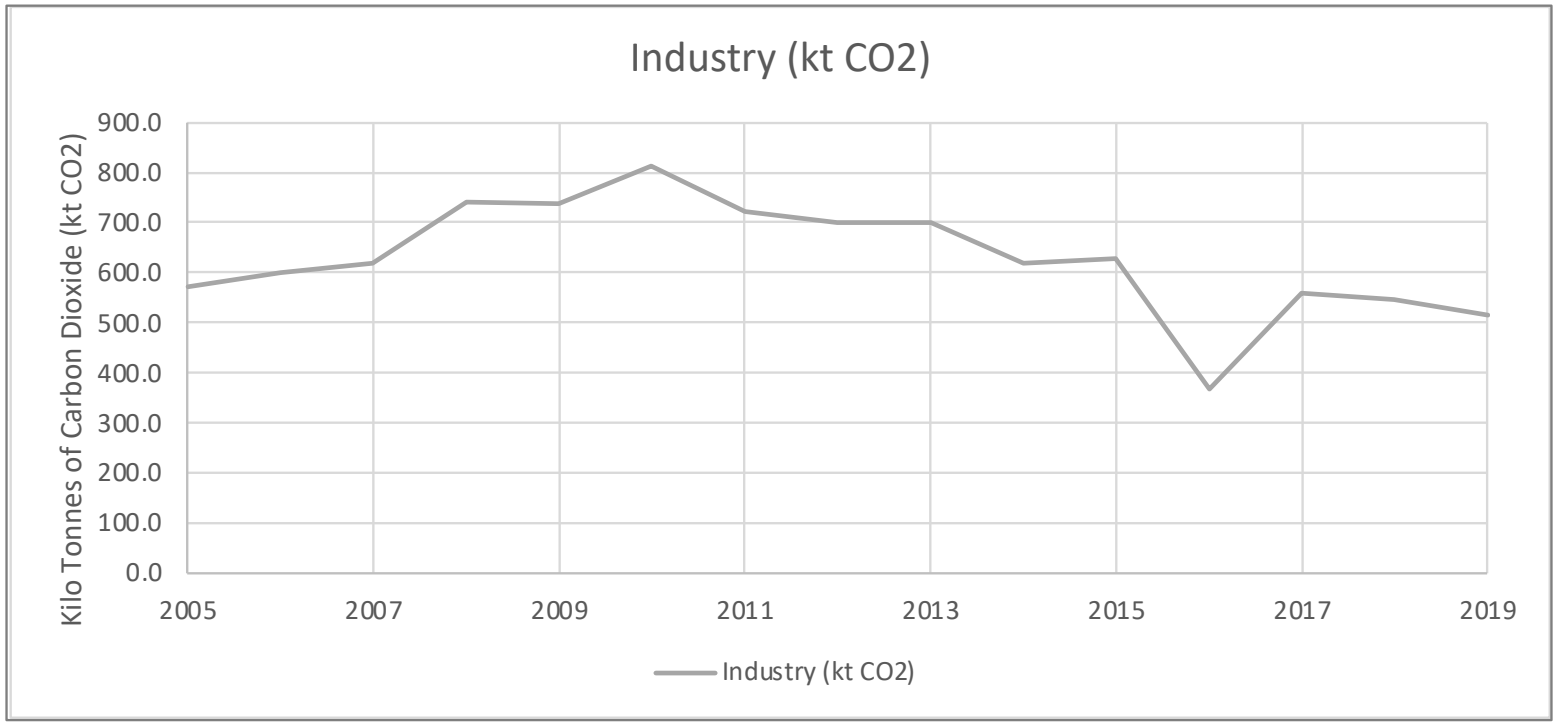
King's Lynn and West Norfolk CO_2 Emissions Change: 2005 - 2019



Total emissions decreased by 3.2% from 2018 - 2019

Borough Council of King's Lynn & West Norfolk

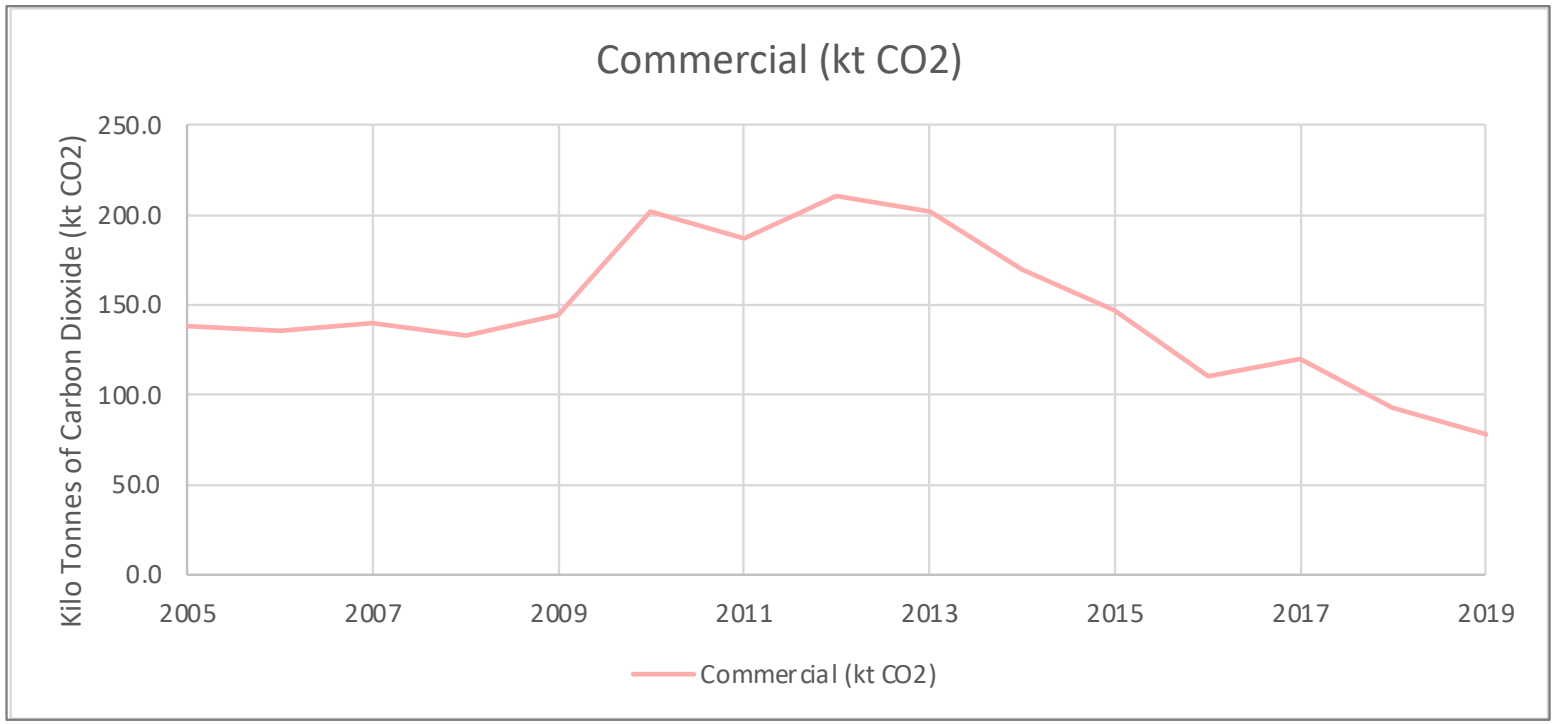
Industry



Industry emissions decreased by 6% from 2018 - 2019

Borough Council of King's Lynn & West Norfolk

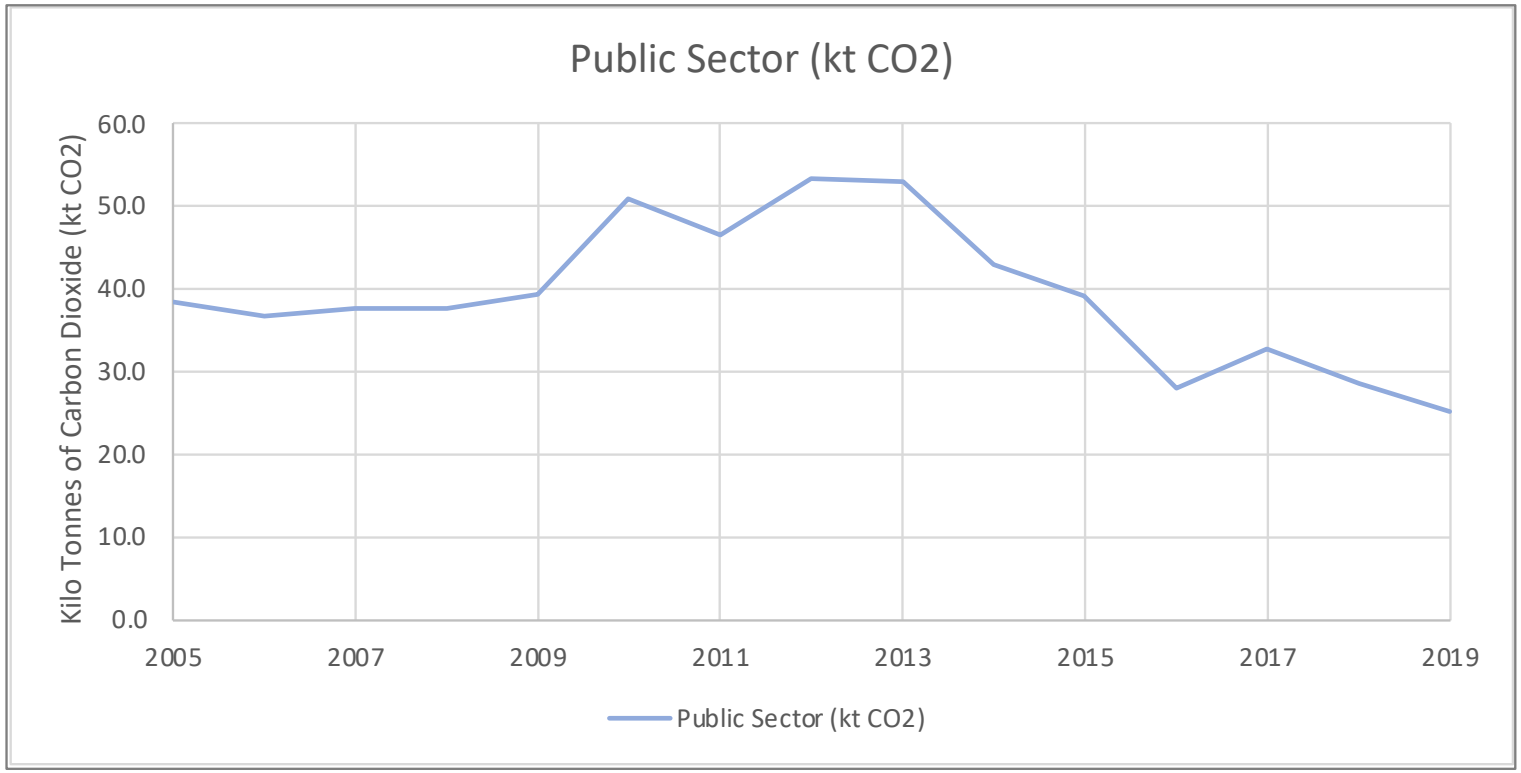
Commercial



Commercial emissions decreased by 16.2% from 2018 - 2019

Borough Council of
King's Lynn &
West Norfolk

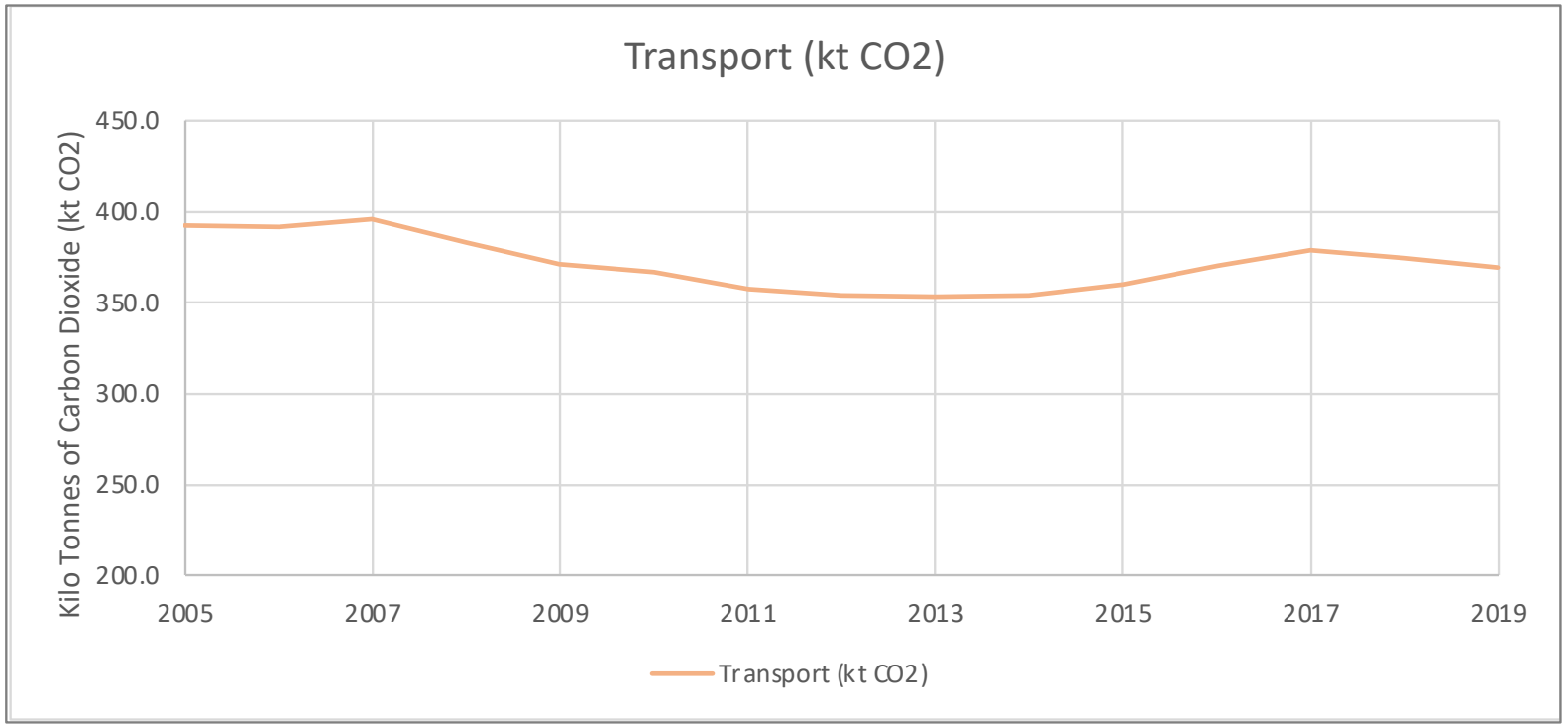
Public Sector



Public Sector emissions decreased by 11.6% from 2018 - 2019

Borough Council of King's Lynn & West Norfolk

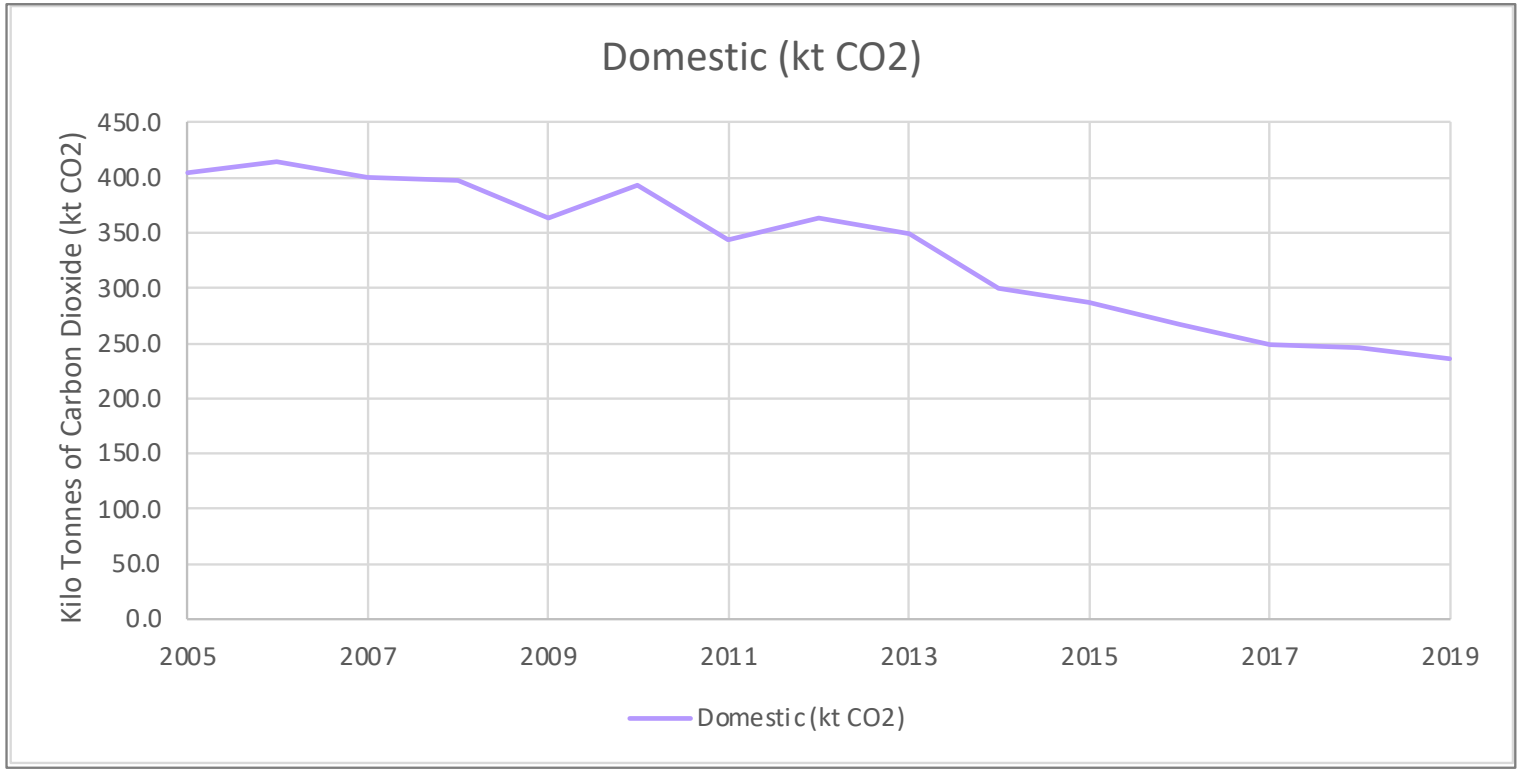
Transport



Public Sector emissions decreased by 1.4% from 2018 - 2019

Borough Council of King's Lynn & West Norfolk

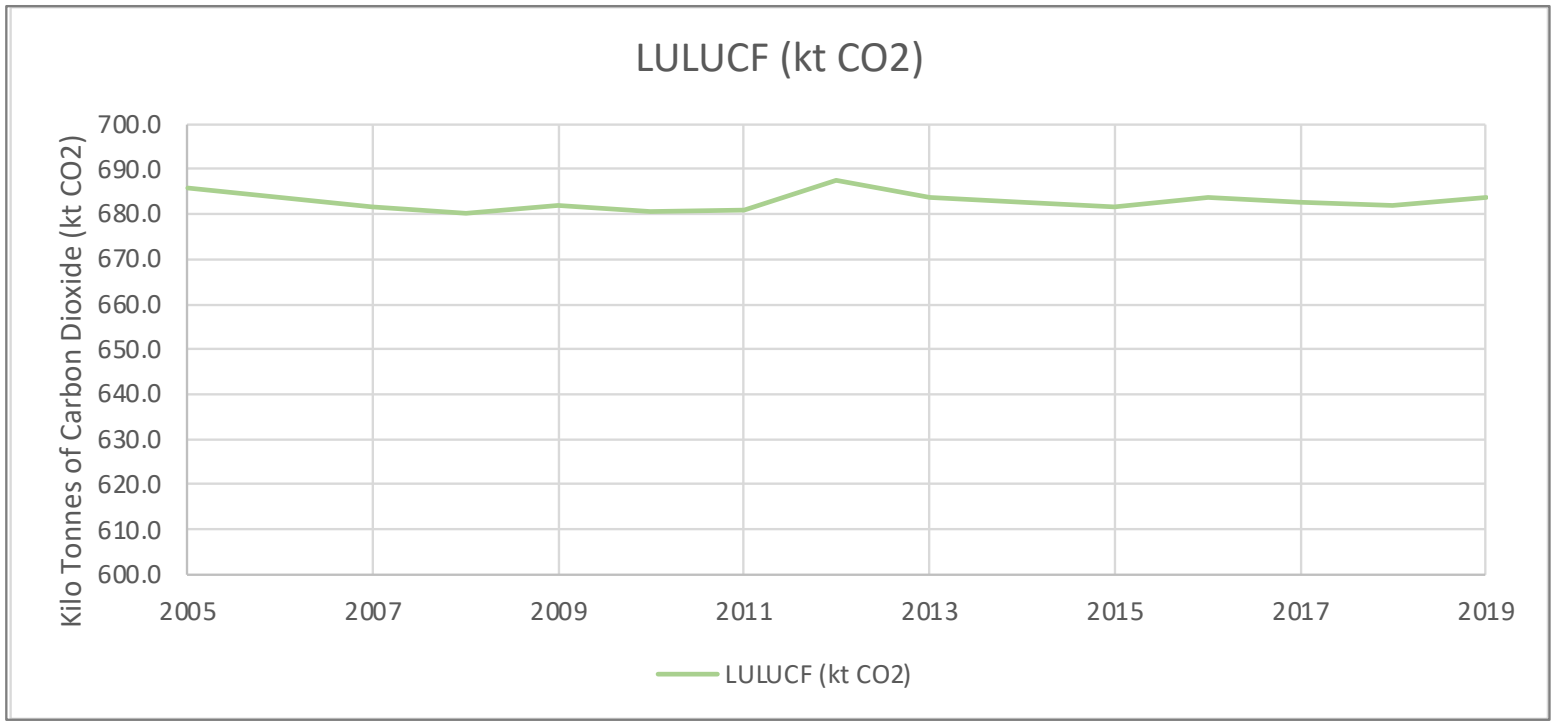
Domestic



Domestic emissions decreased by 3.7% from 2018 - 2019

Borough Council of
King's Lynn &
West Norfolk

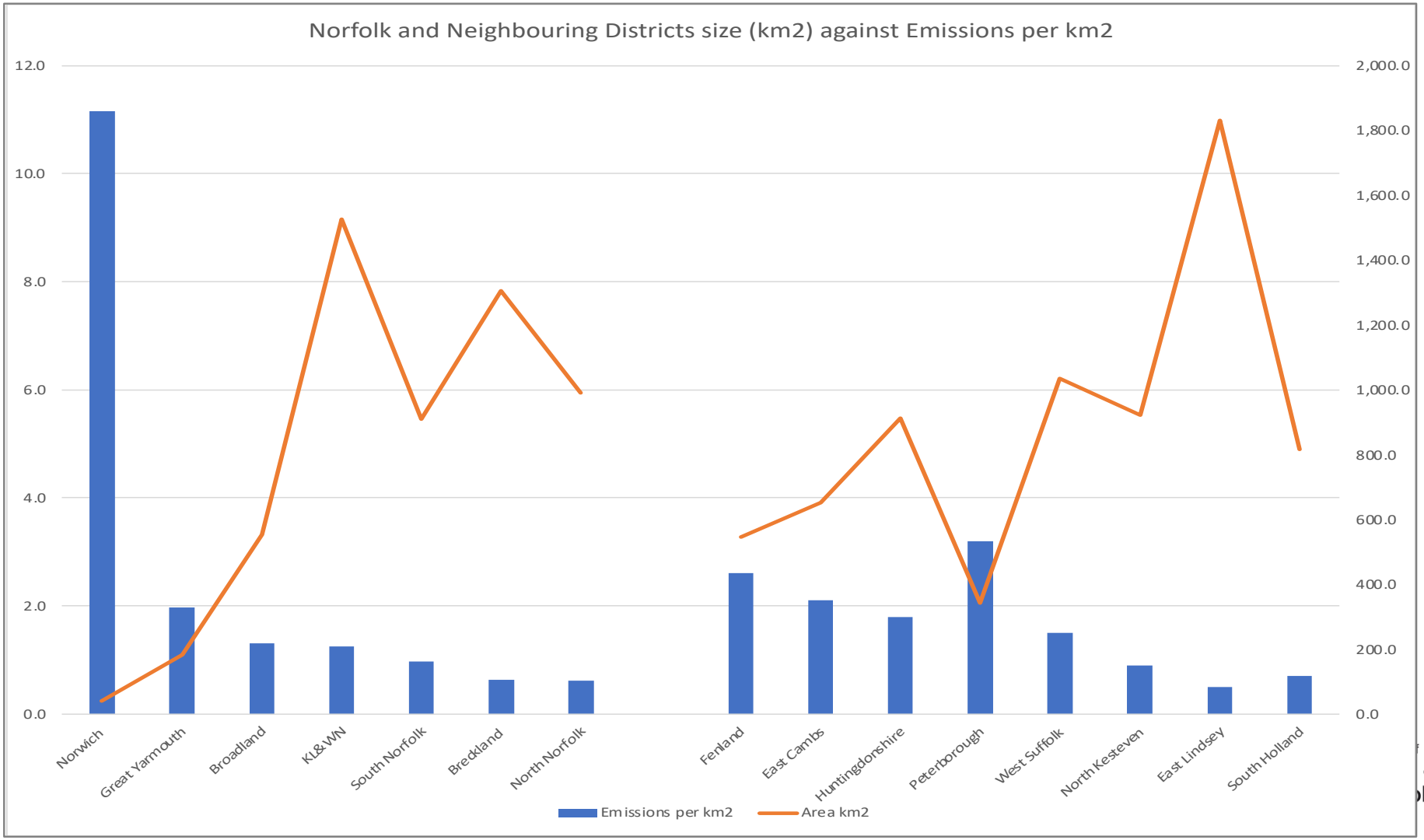
Land Use Land Use Change & Forestry



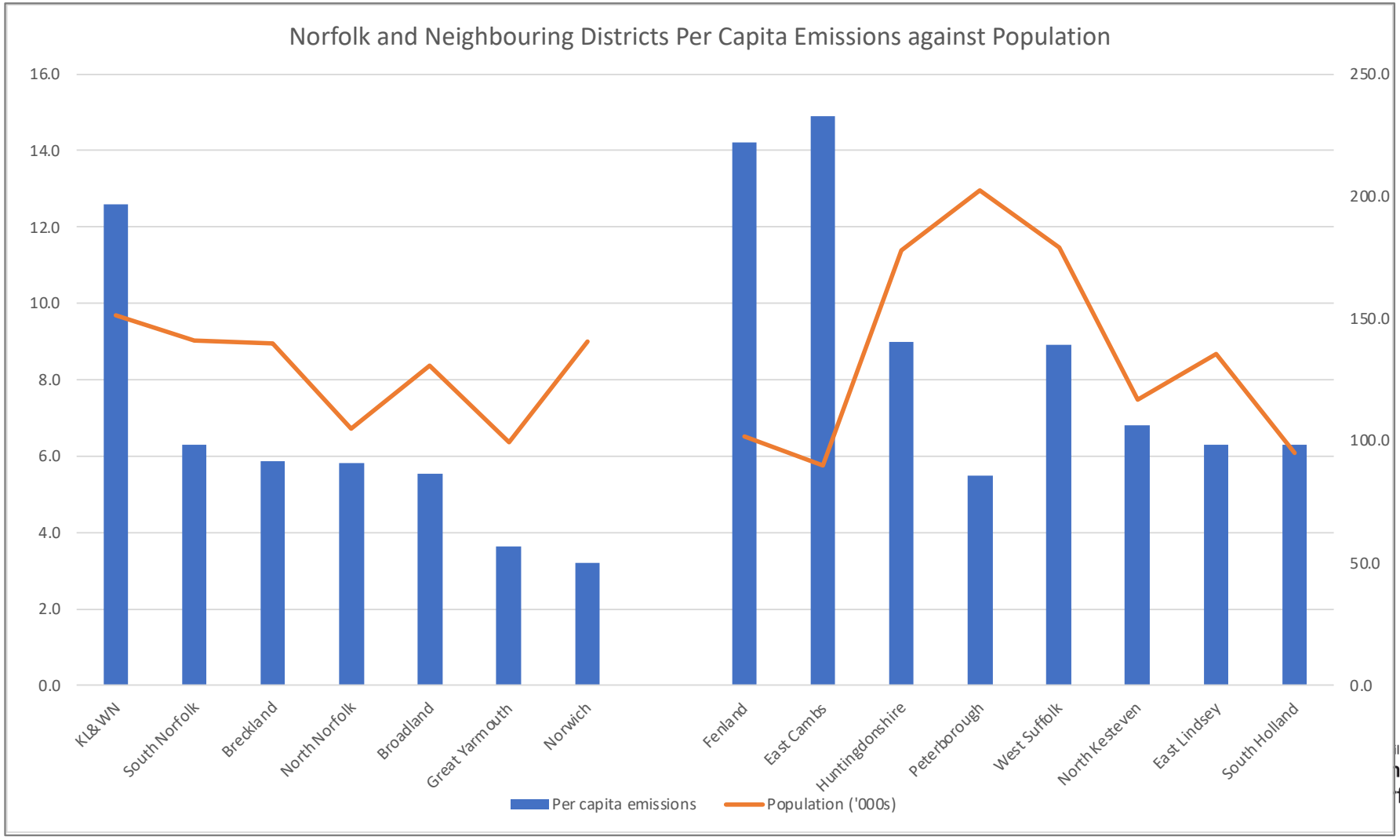
Domestic emissions increased by 0.3% from 2018 - 2019

Borough Council of
King's Lynn &
West Norfolk

Emissions per km^2



Per Capita Emissions



Key CO_2 Emissions Changes: 2005 - 2019

- Historical **LULUCF** emissions have changed the most since the improved methodology introduced with the 2019 data.
- LULUCF emissions account for the largest proportion of our district emissions. Overall, LULUCF emissions have decreased from 685.6 kt CO_2 in 2005 to 683.8 kt CO_2 in 2019. This represents a 0.3 % decrease.
- The revised methodology accounts for a historical change in LULUCF emissions of over 600% from previous estimates.
- Emissions fell to their all-time low in 2016, as a result of a reduction in emissions from industry gas usage. There was a subsequent increase in emissions for 2017 from the same source. Unfortunately, BEIS don't provide a detailed breakdown of which industrial installations caused this change.
- Overall, emissions have decreased by 15% since 2005, with a 23.9% decrease from the all-time high of 2,505.3 kt CO_2 in King's Lynn and West Norfolk. Total emissions, however, are still 81 kt CO_2 higher than the all-time low of 1,828.8 kt CO_2 set in 2016.

Borough Council of
King's Lynn &
West Norfolk

LULUCF Explanation

- Historical **LULUCF** emissions have changed the most since the improved methodology introduced with the 2019 data.
- It's important to stress that the now larger recorded emissions from LULUCF have always been there. They are now only just being accounted for due to the much improved calculation and estimation methodology.
- LULUCF emissions in our district are mainly from the cropland subsector, which is the lowland drained peat, from our fenlands. These areas of land were drained hundreds of years ago, prior to our knowledge and understanding of the drained peatlands effects on climate change.
- LULUCF emissions from our peatlands are not from our agricultural processes. These are accounted for in the Industry sector. LULUCF emissions from cropland are solely emissions from the natural process by which the peat oxidises and releases emissions.

Borough Council of
King's Lynn &
West Norfolk

Conclusion

- CO_2 emissions decreased by 3.2 % across all six emissions sectors between 2018 and 2019. The commercial sector experienced the greatest reduction (12%). Despite reductions in all sectors (with the exception of LULUCF, which increased by 0.3 %), 2019 CO_2 emissions were still higher than the all-time low emissions level of 2016.

- The national LULUCF calculation methodology was revised, and emissions changed from a 14-year average of 84.8 kt CO_2 to a 14-year average of 682.7 kt CO_2. The cropland subsector, which is a result of our district's drained peatlands, is the primary source of LULUCF emissions in King's Lynn and West Norfolk. This includes total sequestration in the district, with agriculture emissions accounted for separately in the industry sector.

- LULUCF accounts for the largest source of our district emissions.

Borough Council of
King's Lynn &
West Norfolk