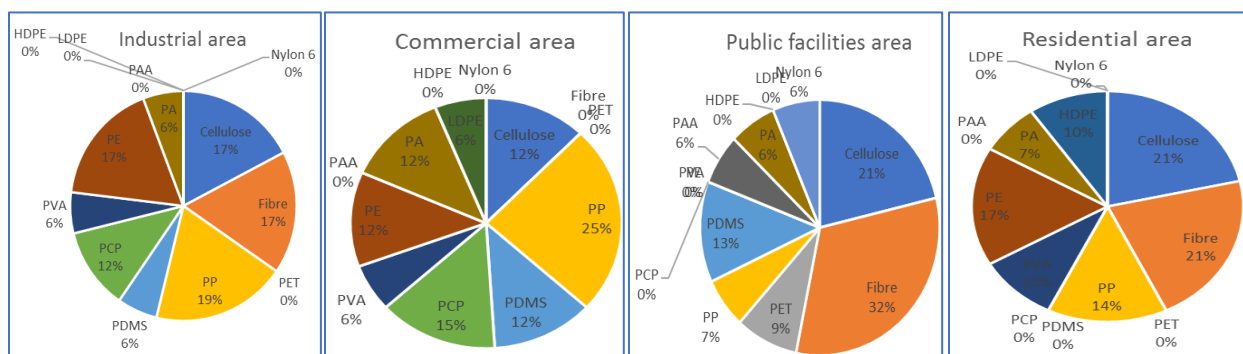
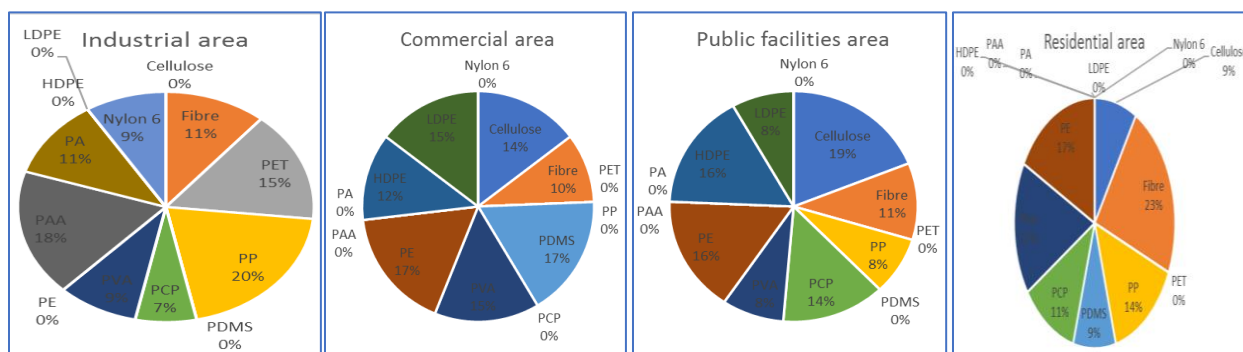


Table S1: FTIR spectra peak assignment for the MP type identification

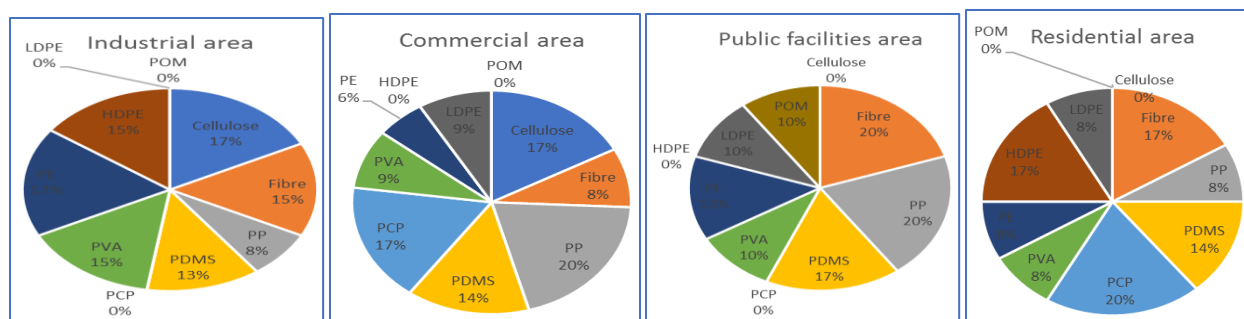
The main peaks for HDPE MPs spectrums were at 3022 cm^{-1} , 2891 cm^{-1} , and 1095 cm^{-1} for C-H, CH_2 and C-C respectively; for nylon 6, it was at 3298 cm^{-1} , 2934 cm^{-1} , and 1636 cm^{-1} for N-H, C-H and C=O respectively; for PAA it was at 1653-1654 cm^{-1} , 3300 cm^{-1} , and 3410 cm^{-1} for C=O, OH and NH_2 respectively. PDMS gave adjacent double peaks at 789-796 cm^{-1} , 1020-1074 cm^{-1} , and 2950-2960 cm^{-1} for Si-C, Si-O-Si and CH_3 respectively and for PP, it was at 2920 cm^{-1} , 1456 cm^{-1} , and 990 cm^{-1} for -O-H, CH_3 and CH_2 respectively. The main peaks for fibre MPs spectrums were at 3500-3000 cm^{-1} , 1630 cm^{-1} , and 1000-1500 cm^{-1} for -O-H, -C-O- and -C-H respectively; for cellulose, it was at 3391 cm^{-1} , 2906 cm^{-1} , and 1061 cm^{-1} for -O-H, -C-H and -C-O- respectively and for PET it was at 3700 cm^{-1} , 2500 cm^{-1} , 1710 cm^{-1} , 1380 cm^{-1} , 1100 cm^{-1} and 900 cm^{-1} for -O-H, -C-H, -C=O-, -C-O-C-, -C-H and aromatic -C-H respectively. For PVA MPs spectrums were at 3550-3200 cm^{-1} , 2840-3000 cm^{-1} , 1750-1735 cm^{-1} and 1461-1417 cm^{-1} for O-H, C-H, C=O and CH_2 respectively; LDPE gave adjacent double peaks at 3070-3085 cm^{-1} , 2345-2370 cm^{-1} , 1812-1820 cm^{-1} , and 1055-1065 cm^{-1} for C-H, C-C, C=O and CH_2 respectively and for PE, it was the C-H (flexural) at 690-900 cm^{-1} , C-C at 1475-1600 cm^{-1} and C-H (vibratory) at 3 000 cm^{-1} were observed.



(a) Without lockdown



(b) Partial lockdown



(c) complete lockdown

Figure S1. Distribution of MP types in dusts from the different land use category.