Figure 4.4: Environmental outcomes will improve through Commission recommendations and government action

Trajectory of air quality, water quality and biodiversity, 2025-55



Air quality

NOx and PM 2.5 emitted from road transport, and electricity generation, and NOx emitted from gas boilers

Water quality

Only 16 per cent of water bodies in good ecological condition, including 40 per cent affected by rural pollution, 36 per cent by waste water, including eight per cent from raw sewage, and 18 per cent by pollution from towns, cities and transport

Biodiversity

Since 1970, 41 per cent of species have decreased in abundance and 15 per cent are threatened with extinction in the UK '



Background trends

By 2035 all new cars and vans will be zero emission (80 per cent by 2030)

Commission recommends

Phase out gas boilers and unabated gas fired generation, support electric vehicles and fund urban transport projects

Background trends

Climate change could increase sewage spills and road run off, but £60 billion investment to reduce raw sewage spills, and target for most phosphorous to be removed from treated wastewater by 2038

Commission recommends

Reduce water taken from the environment & invest in surface water flood management and water quality improvements

Background trends:

New NSIPs require projects to deliver biodiversity net gain

Commission recommends:

Improve biodiversity through maintenance and renewals, use nature based solutions to manage flood risk, and planning should support strategic environmental management



NOx emissions - 100 per cent reduction from gas boilers, over 95 reduction from road transport, and 75 per cent reduction from electricity generation

PM2.5 emissions - 90 per cent reduction from electricity generation, but two per cent increase from road transport due to increased traffic volumes² If targets are not met, 80 per cent reduction in raw sewage discharged to water bodies by 2050, 80 per cent reduction in phosphorous in treated wastewater by 2055, and reduced impacts from surface run off

Despite climate change, fewer waterbodies affected by excessive abstraction

New NSIPs deliver at least ten per cent increase in biodiversity compared to baseline levels

Infrastructure maintenance and renewal enhances biodiversity and ecological networks

Sources: National Atmospheric Emissions Inventory; Defra; Environment Agency; Commission analysis; Department for Transport National Road Traffic Projections 2022

¹ Infrastructure development is not the principal cause but can contribute to this problem

²This assumes electrification of the vehicle fleet is approaching 99 per cent in line with the Department for Transport's 'vehicle led decarbonisation scenario' and that gas boilers are no longer in use for household heating