Partnering to achieve a low carbon future

UK Challenge

The Government, NHS and Industry are bound by the Montreal Protocol to reduce the production and consumption of hydrofluorocarbons by equivalent to:

70bn tonnes CO_2 by 2050[1]

The Environmental Audit Committee have recommended switching 50% of all inhalers to low carbon by 2022, and recycling 50% of MDI inhalers by 2020[2]

DEFRA has agreed that low carbon inhalers should be promoted in the NHS[3]

The NHS is likely to miss its 2020 target of a 34% reduction in carbon emissions[4]

70% of all inhalers in the UK are MDIs which contain greenhouse gases[5]

3.5% of the NHS total carbon emissions are from MDIs[5]

18 times less carbon in a DPI compared to an MDI[6]

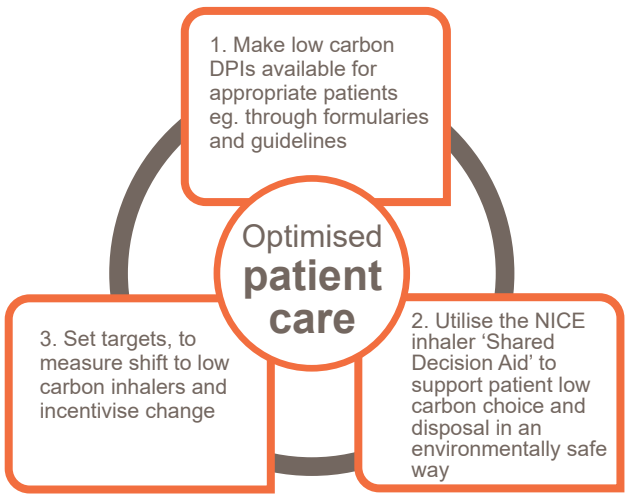
NHS commitments: opportunities for change

The NHS England Sustainable Development Unit has proposed a target of **reducing inhaler emissions by 50%** over the next ten years[7]

The NICE inhaler 'Shared Decision Aid' for asthma will enable clinicians and pharmacists to **discuss available inhalers with patients** and, where clinically appropriate, offer a low carbon inhaler choice[8]

The NHS England Long Term Plan commits to supporting patients in inhaler technique which could also **reduce medicines wastage and inappropriate prescribing**[9]

Our proposal: partnering with the NHS



The benefits: carbon, cost and patient

Halving the amount of emissions from inhalers would lead to approx.

230,000 fewer cars[10] on UK roads

British Thoracic Society (BTS) guidance

The 2019 SIGN/ BTS British Guideline on the Management of Asthma recommends that inhalers with a lower carbon footprint - such as dry powder inhalers (DPIs) - should be used when they are likely to be equally effective[11]

The Committee on Climate Change 'Net Zero' Technical Report states that "it is feasible and cost-effective to switch MDIs to DPIs and low-GWP[12]

Better control in respiratory care could lead to less medicines waste and better adherence, with a lower carbon co-benefit

This collaboration will bring the NHS closer to its targets and **empower patients to make lower carbon choices**

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[1]https://www.gov.uk/government/news/uk-ratifies-new-agreement-to-tackle-global-warming. [2]https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/469/469.pdf [3]https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1406/1406.pdf [4]https://www.sduhealth.org.uk/documents/publications/2016/Carbon_Footprint_Summary_NHS_update_2015_final_v2.pdf [5]https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/469/46905.htm#footnote-120 [6]Hillman, T. Mortimer, F and Hopkinson, N. (2013). Inhaled drgs and global warming: time to shift to dry powder inhalers. British Medical Journal. DOI: 10.1136/bmj.f3359 [7]https://www.sduhealth.org.uk/documents/AboutUs/LTP%20comms/inhalers%20(2%20slides)%20v1.1.pptx [8]https://www.nice.org.uk/guidance/ng80/resources/inhalers-for-asthma-patient-decision-aid-pdf-6727144573 [9]https://www.longtermplan.nhs.uk/ [10]Data on file Carbon Savings from Recycling Inhalers – UK/RESP/0296/18 [11]BTS/Sign British Guideline on the Management of Asthma 2019 (SIGN 158) https://www.sign.ac.uk/assets/sign158.pdf. [12]https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-Technical-report-CCC.pdf analysis 2017.