

RELAS

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Luton Stack & Flight Paths

aircraft noise and disturbance

17th july 2023 - hosted by RELAS

agenda

- background
- impact analysis
- activities & progress
- complaint guidance & key takeaways
- guest speakers
- closing summary and Q&A

background

what's the issue?

*as a direct consequence of
Swanwick Airspace Improvement Programme - AD6*

- 57,000+ new [disruptive] aircraft overflying our area since february 2022
- causing **significant distress and disturbance** to many
- our rural, peaceful countryside has been spoilt by this [imposed] blight
- the **consultation** process was **deeply flawed** and the **design poor**
- AD6 was never about safety - simply the expansion of Luton & Stansted
- airbraking and engine noise are deeply upsetting to residents

background

the flawed consultation process...

- run during the covid lockdown
- key stakeholders excluded and scrutiny process inadequate
- lacked thorough environmental impact analysis
- poor design - the options presented were not options
- inadequate consultation process with impenetrable materials
- data provided inaccurate and misleading
- <https://www.nats.aero/vr/ad6/>
- impact & disturbance much worse than indicated
- whole communities unaware of AD6 yet are detrimentally affected
- important feedback disregarded

background

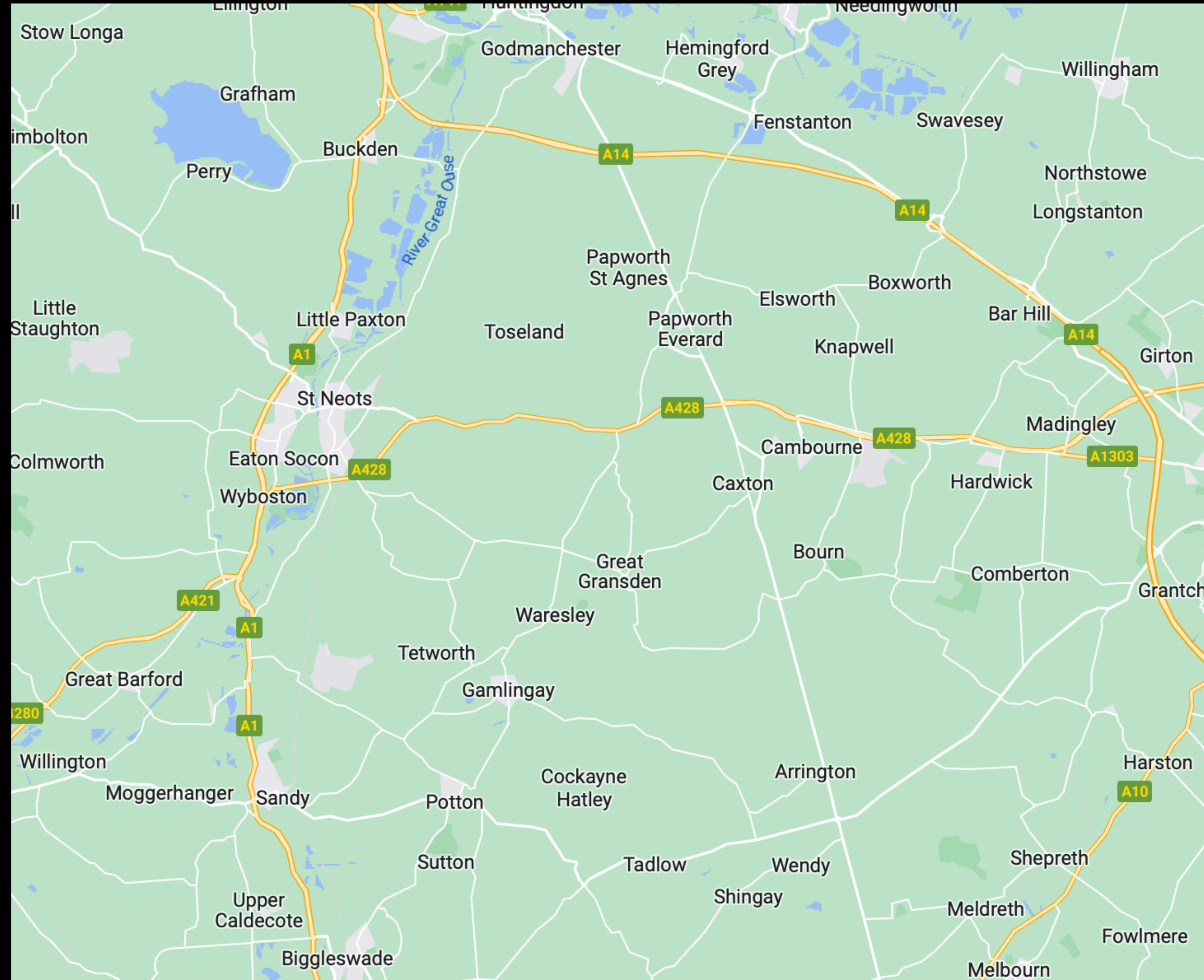
the flawed implementation process...

- 7 stage process for implementing airspace changes and ad6 is currently at stage 7
- data on complaints, tracks & aircraft altitude are collected and (allegedly) provided to the CAA (as regulators of the airspace) who decide if the route can be made permanent or if changes are required
- this process is run by the programme sponsors — london luton airport (LLA) and NATS
- LLA are “marking their own homework” by handling complaints themselves
 - complaints rarely responded to and are dismissive when they are - even when evidence provided
 - complaints not dealt with transparently or weighted as to impact on those adversely affected
 - it appears there is skewing and massaging of complaints data in LLA quarterly reporting
- engagement meetings are unconstructive and nothing more than a PR exercise with agreed actions never happening or later refused

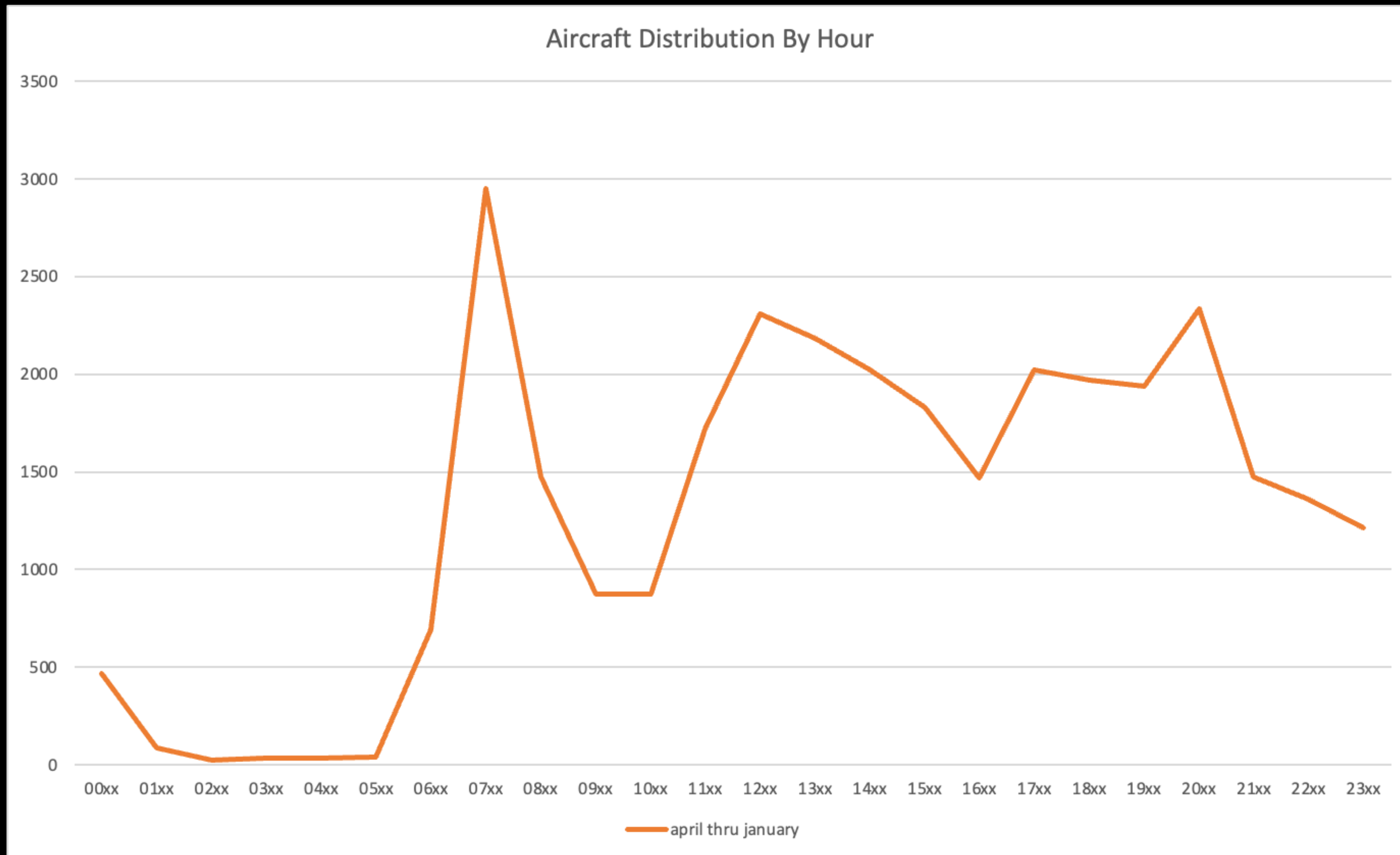
impact analysis

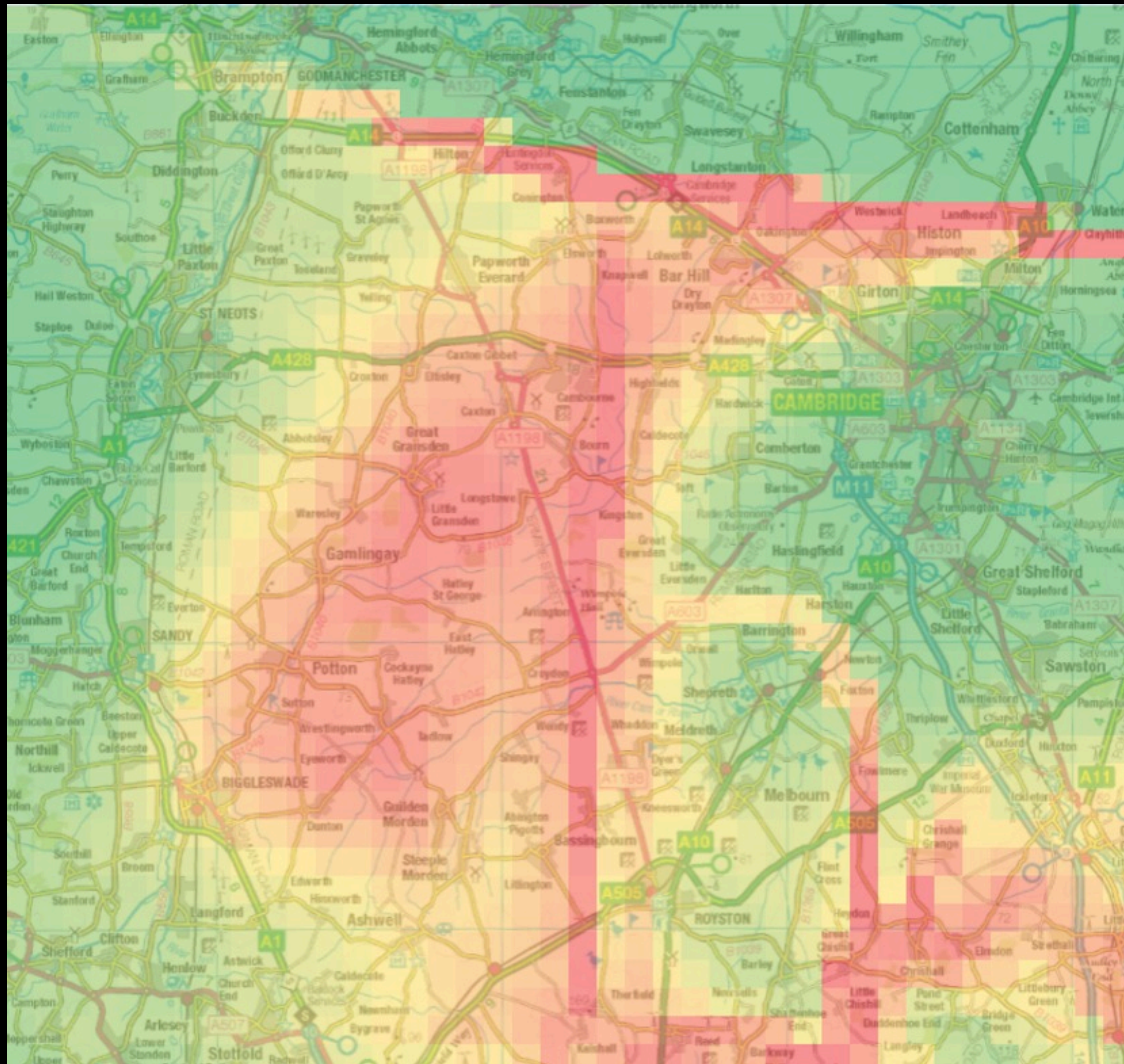
- RELAS have been capturing real time flight data since April 2022
- we have provided analysis reports to parish, district, county councils & MPs
- various studies conducted
 - flight patterns / airspace utilisation
 - noise data study
 - airbraking / noise profiling study
 - pollution / environmental impact

- study period april 2022 through june 2023
- covers a 40km x 40km area
- 57,000 new jet aircraft operating between 5k and 20k feet
- 44,000 between 5k and 12k feet
- 101 / day @ 12k, 130 / day @ 20k
- equates to 4,400 hours of pollution / emissions



temporal distribution



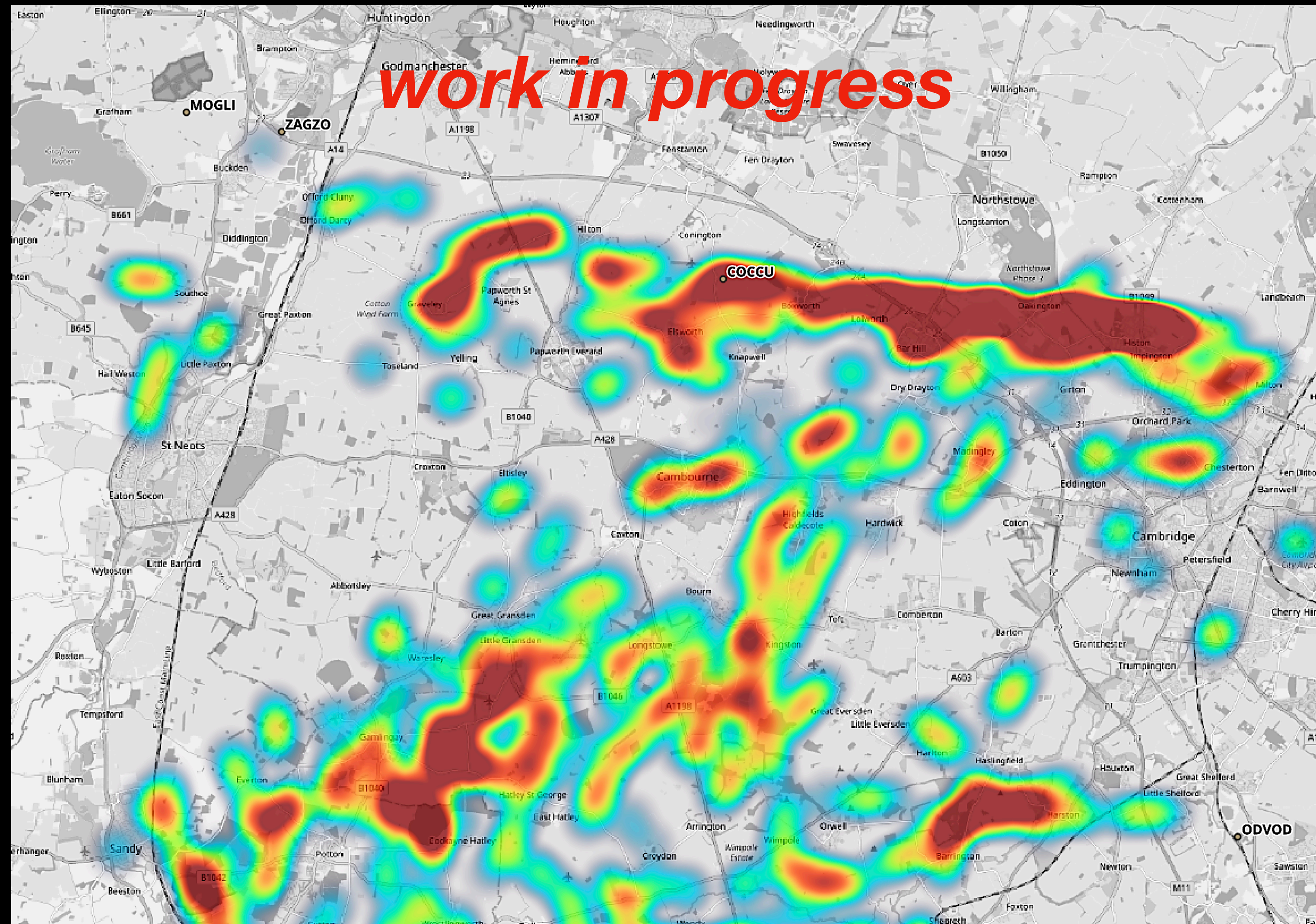


noise data study

- conducted independently by RELAS and funded by LGPC
 - LLA equipment does not work in the rural locations that complained
 - LLA would not share data
- ambient nighttime sound levels average around 18dB
- ambient daytime sound levels average around 33db
- confirms aircraft within 3km of monitor routinely exceed 51dB
- the incremental uplift is very significant often peaking above 62dB
- study shows the consultation materials are inconsistent with sampled data

noise profiling study

identifying and profiling the use of airbrakes by inbound aircraft



pollution study

green house gas (GHG) emission

presented by Sam Rostami PhD consultant scientist

Green House Gas (GHG) Emission

- Global GHG Emitted in 2019
- GHG per Capita
- GHG from Aviation industry
 - AD6

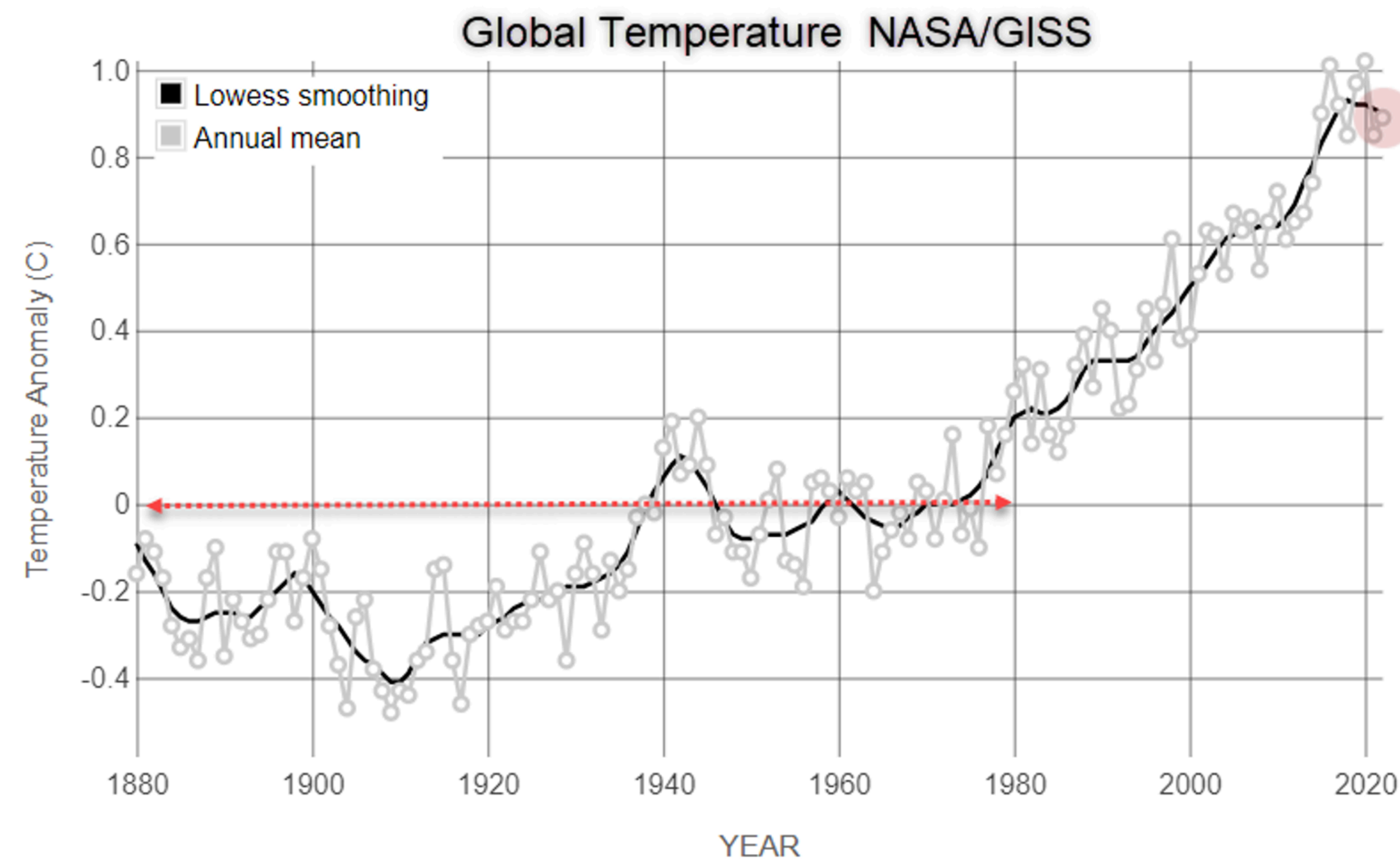
Sources:

1. Intergovernmental Panel of Climate Change Report 2022 IPCC_Ar6_WGIII 2022
2. [Carbon dioxide now more than 50% higher than pre-industrial levels | National Oceanic and Atmospheric Administration \(noaa.gov\)](#)
3. <https://www.eesi.org/papers/view/fact-sheet-the-growth-in-greenhouse-gas-emissions-from-commercial-aviation>

Aviation Impacts

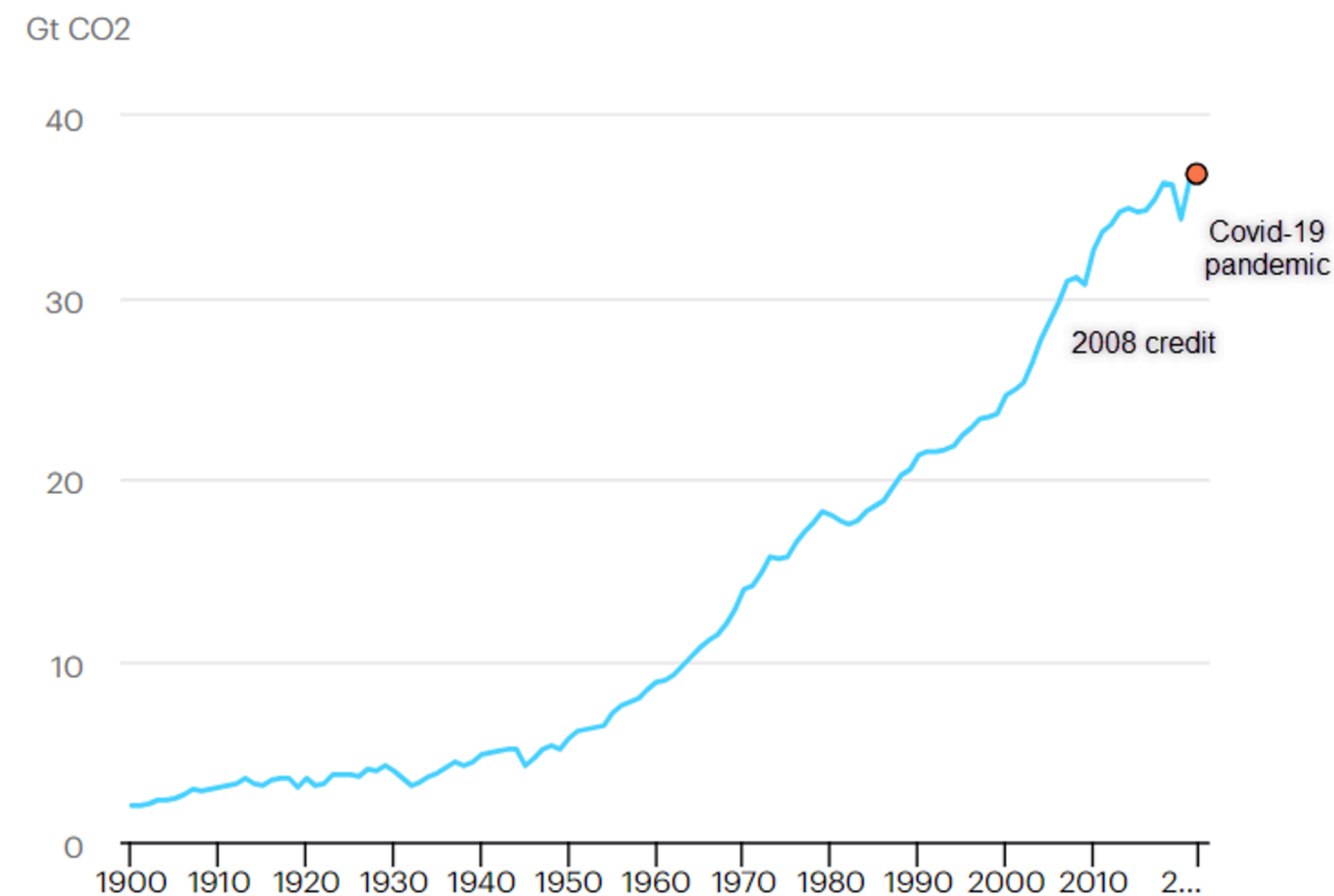
- Noise
 - Sleep disturbance,
 - Stress, Anxiety
 - Hearing damage
 - Air Pollution (NO_x, PM, VOC)
 - Respiratory
 - Cardiovascular
 - Lung cancer
 - Meningitis
 - Quality of Life
 - Property devaluation
 - Disruption of Daily Activities (work, study, relaxation...)
 - Environmental Impact
 - Sense of helplessness
 - Frustration
 - Wild life
- 99% of global population breathe polluted air that exceeds [WHO guideline limits](#).
 - Annually 7 million die prematurely as result of all sources of air pollution (WHO)
 - 90% of children breath PM_{2.5} and 16% die from pollution (BMJ May2023)

Global Change in Temperature



Global CO2 emissions from energy combustion and industrial processes, 1900-2022

Open



Number of World Disasters

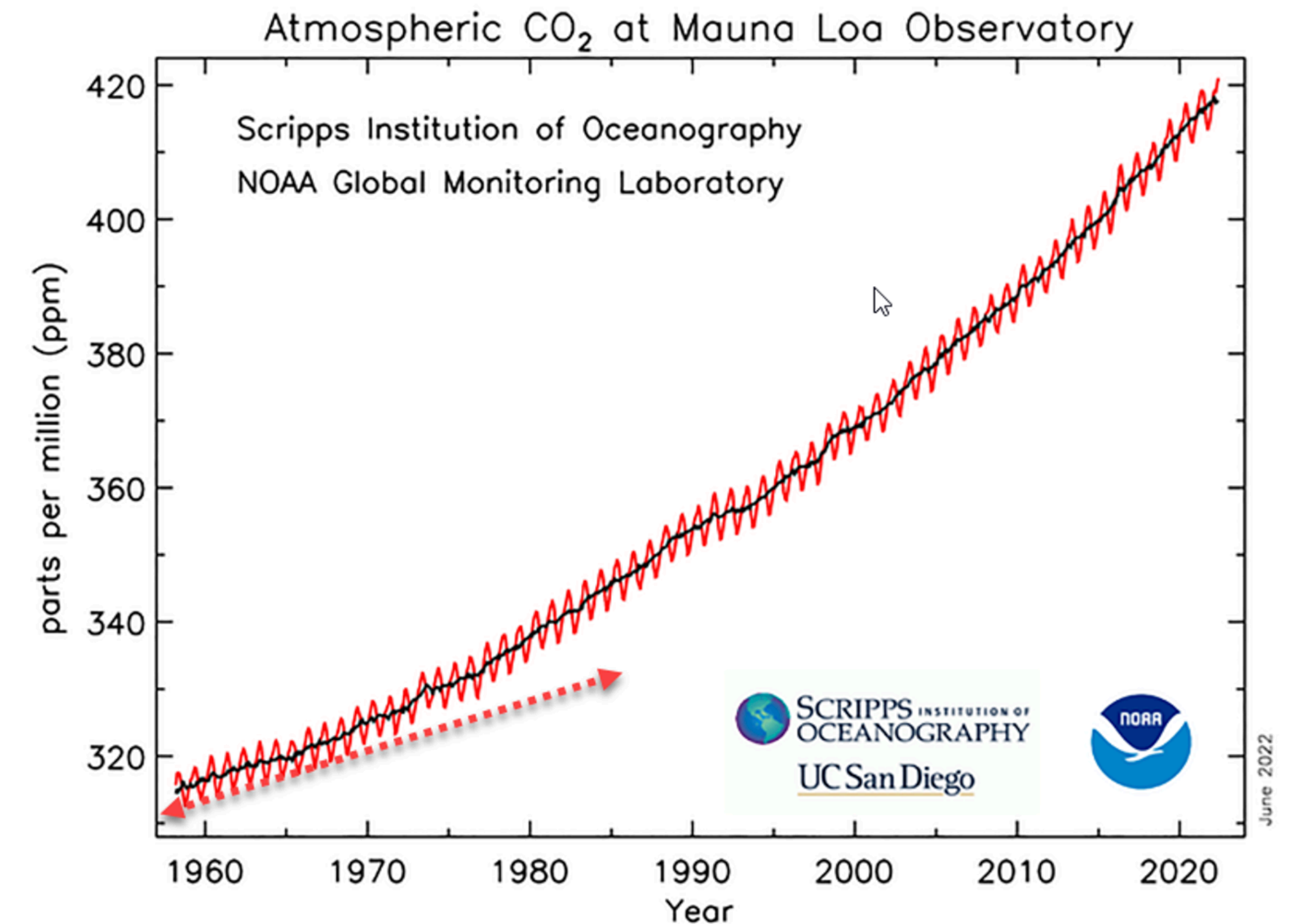
Years	Number	Killed
1900-1909	28	-
1997-2006	6866	1,200,000

Some Facts About Carbon Dioxide

- Has no smell or colour.
- Stays in the atmosphere for 300 to a few 1000 years
- Prior to industrial revolution atmospheric carbon dioxide levels were around 280 ppm.
- The rate of increase accelerated since 1980.
- So changes are coming faster, and they're becoming more significant.



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce
June 3, 2022



2019 GHG Emitted Globally

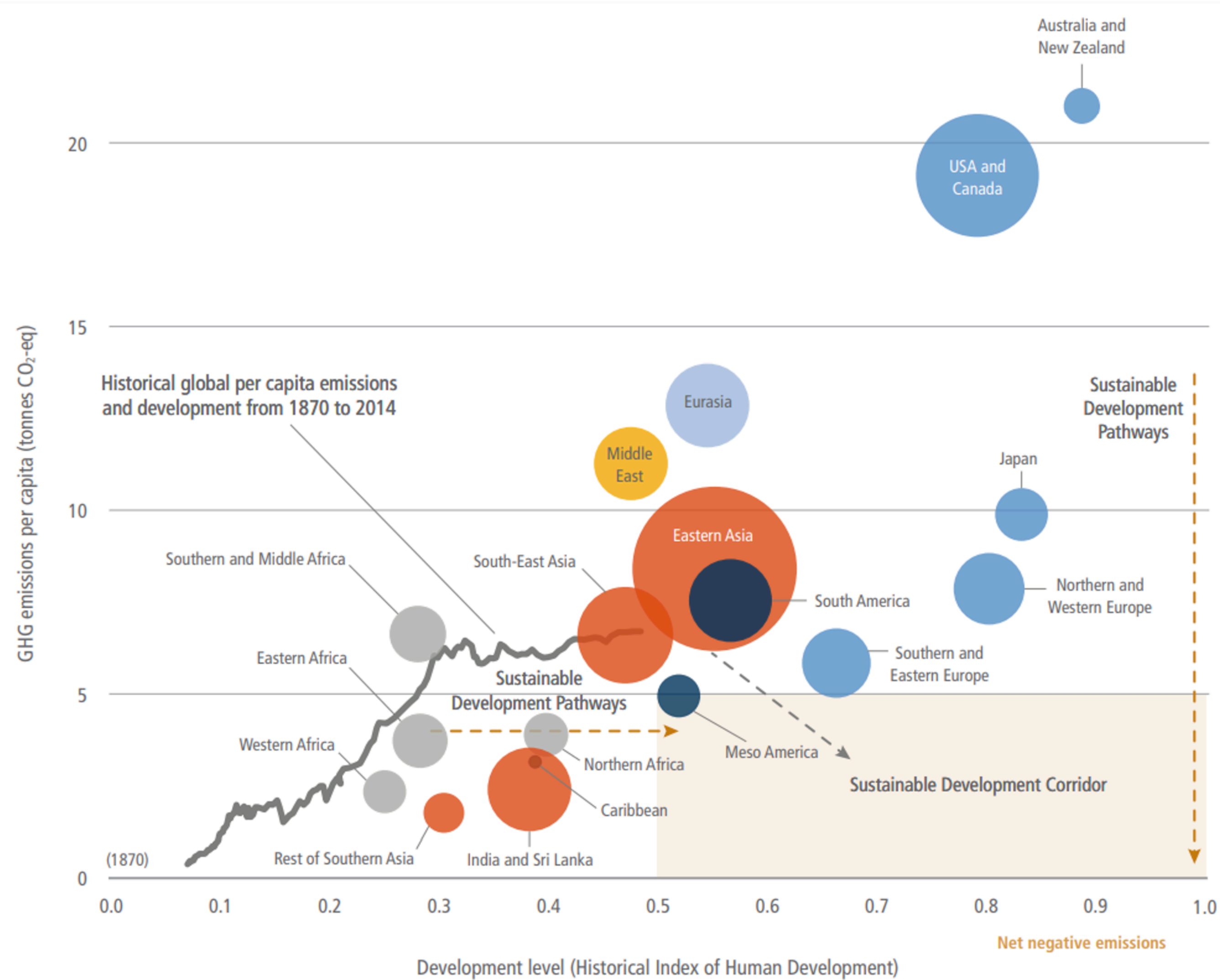
GHG Emitted in 2019	Giga Tons (10 ⁹ Tons)
Carbon dioxide	45 ± 5.5
Methane	11 ± 3.2
Nitrous oxide	2.7 ± 1.6
Fluorinated gases	1.4 ± 0.41
Total	59 ± 6.6

- 59 Gt of GHG emitted in 2019
- Only 2 Gt is absorbed naturally.
- The rest of CO2 stays in the atmosphere.

2019 Source of Emissions	%
Transport	15
Buildings	16
Industry	34
Agriculture	22
Others	12

From Intergovernmental Panel of Climate Change Report 2022 IPCC_Ar6_WGIII 2022

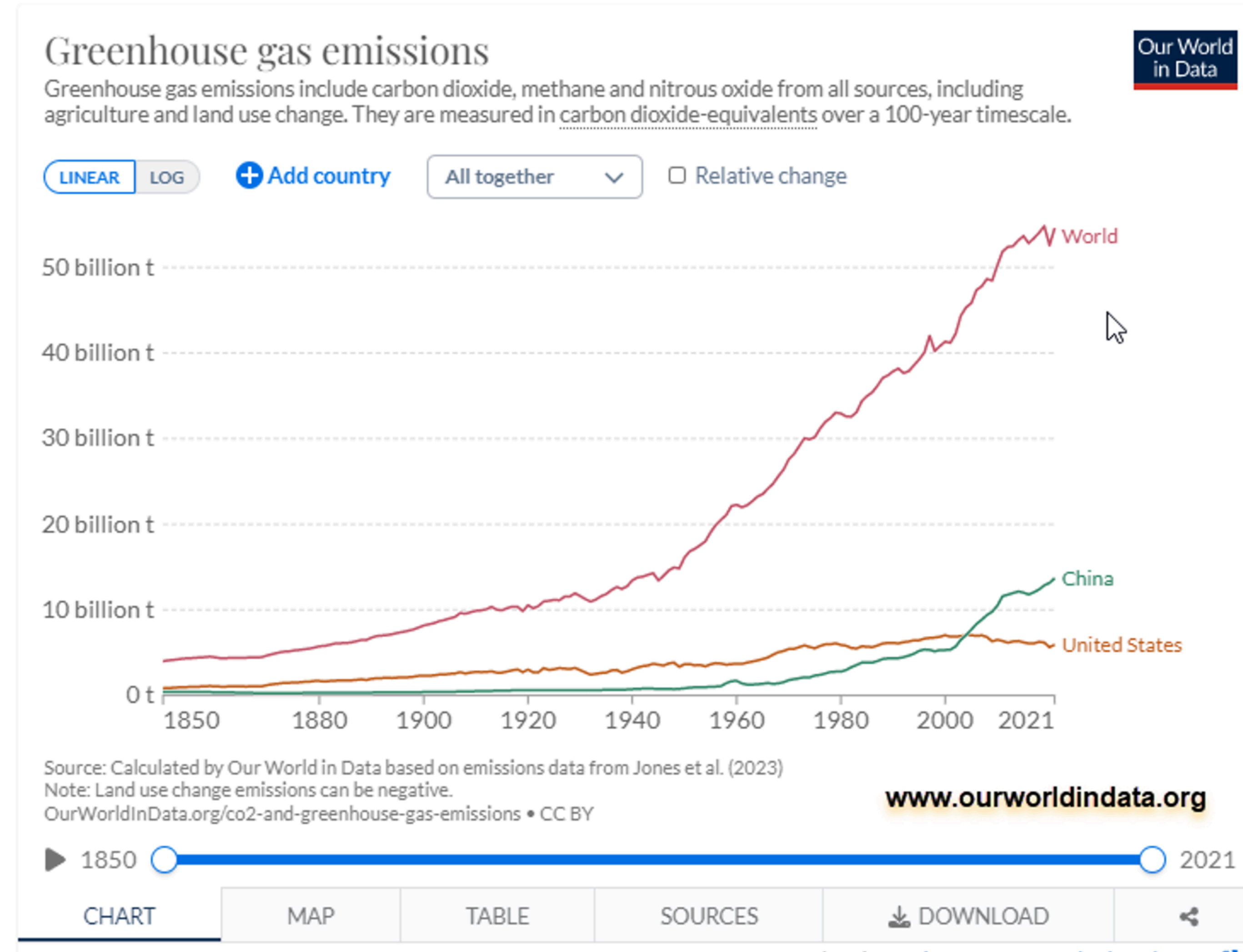
Global GHG Emission Per Capita



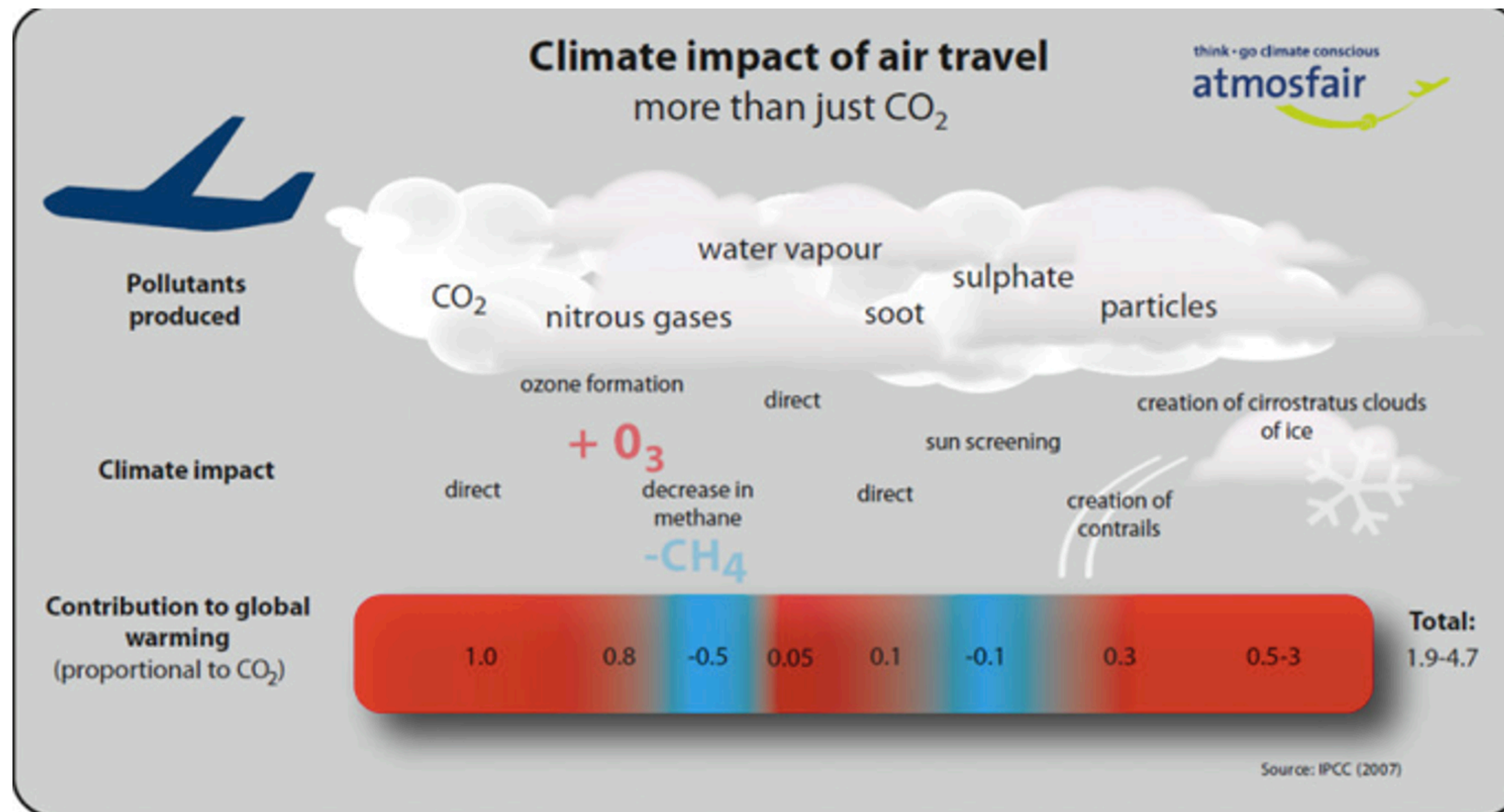
To be sustainable the earth needs below 5GtCO₂e per annum. Excluding any carbon capture technology.

World GHG Emission with time

Global greenhouse gas emissions



GHG Emission From Aviation Industry



- 70% GHG emission from jet fuel is carbon dioxide .
- Boeing 737 or Airbus A321 uses 3 to 5 tons of jet fuel per hour producing 9 to 15 tons of CO₂e per hour.
- 30% of CO₂ emitted absorbed naturally over 30 years.
- 50% of CO₂ disperses over a few 100 years.
- 20% of CO₂ emitted stays in the atmosphere for 1000 of years.
- If global commercial aviation had been a country, in 2019 its national GHG emissions would rank number six in the world. Equivalent to the UK and Germany combined

- PM_{2.5} and UFP role on cancer and meningitis is well established.

CO2 Emission from Flying and Driving

- About 100m barrels of oil extracted daily.
- 4m to 6m barrels of oil is used in plastic industry.
- 400m tons of plastic produced in 2021
- 1.4 Gt of CO₂e is produced from burning fossil fuels
- Plastics contributes 2 to 4 % to the global CO₂ emission.
- A PET bottle weights 10g and 54g of CO₂ is produced for making and shaping it.
- If you fly on Airbus321 with 230 passenger on board for 1 hr on air the pane emits equivalent of 742 PET bottles per passenger.
- Burning a 46Liters tank fuel of my car, I will produce CO₂ equivalent to 2444 PET bottles.

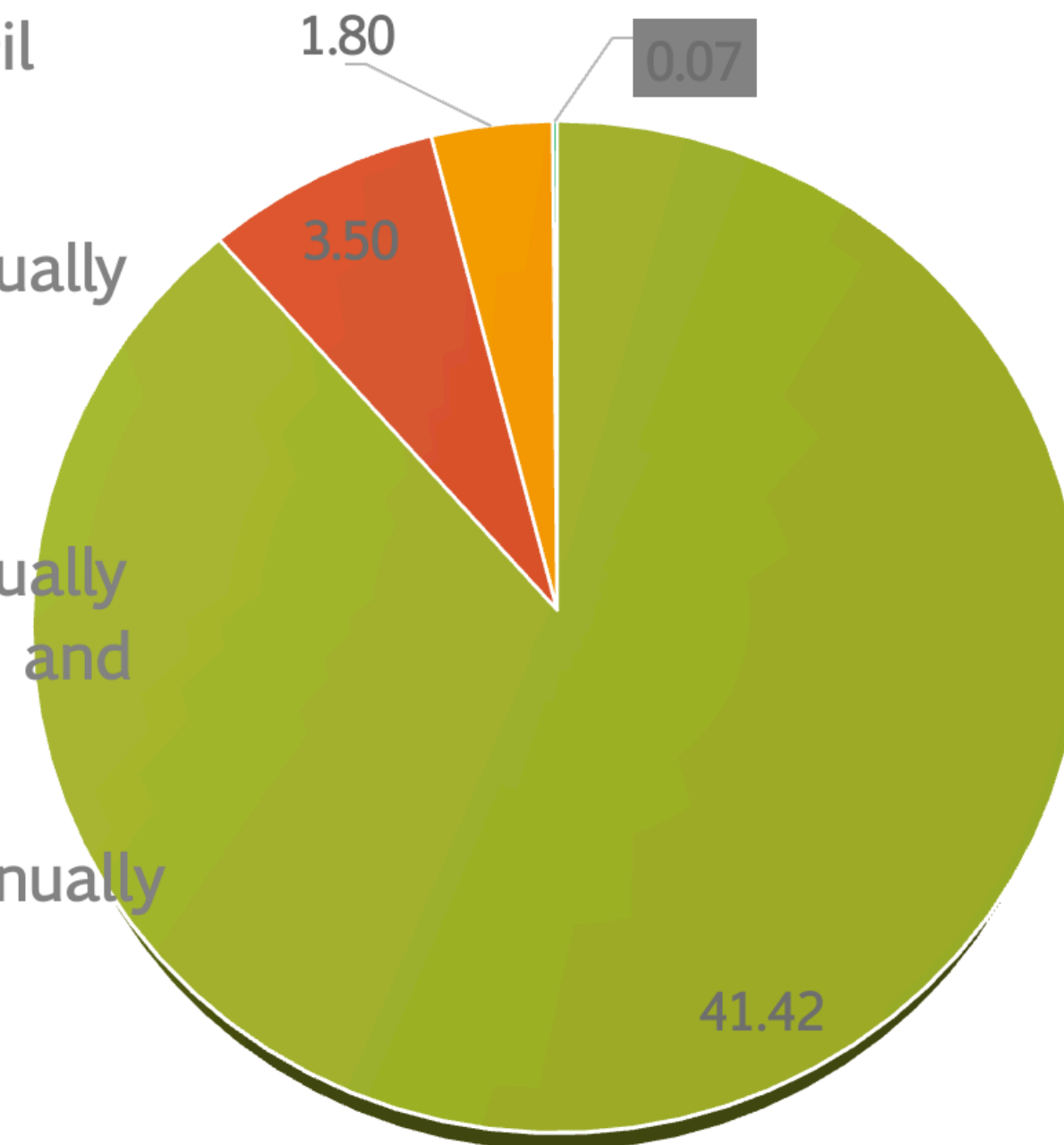
45 Gt of CO2e Emmitted Globally in 2019

■ 41.4 Gt CO2e emitted annually from Burning Oil & Gas

■ 3.5 Gt CO2 emitted annually from other sources

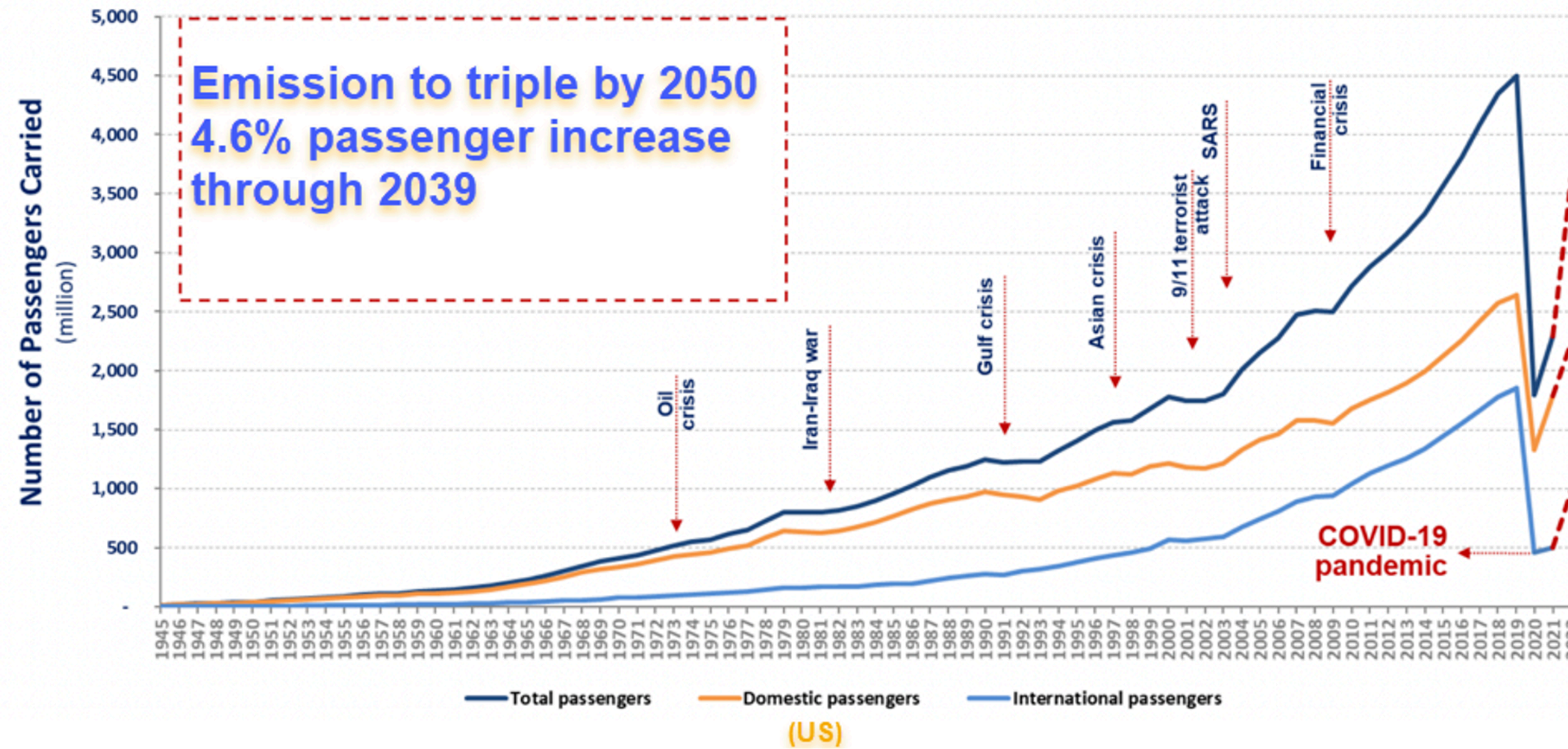
■ 1.8 Gt CO2 emitted annually from Plastics Production and Incineration

■ 0.07 Gt CO2 emitted annually from Plastics used in Healthcare



- 99% of global population breathe polluted air that exceeds [WHO guideline limits](#).
- Annually 7 million die prematurely as result of all sources of air pollution (WHO)
- 90% of children breath PM2.5 and 16% die from pollution (BMJ May2023)

World passenger traffic evolution 1945 – 2022



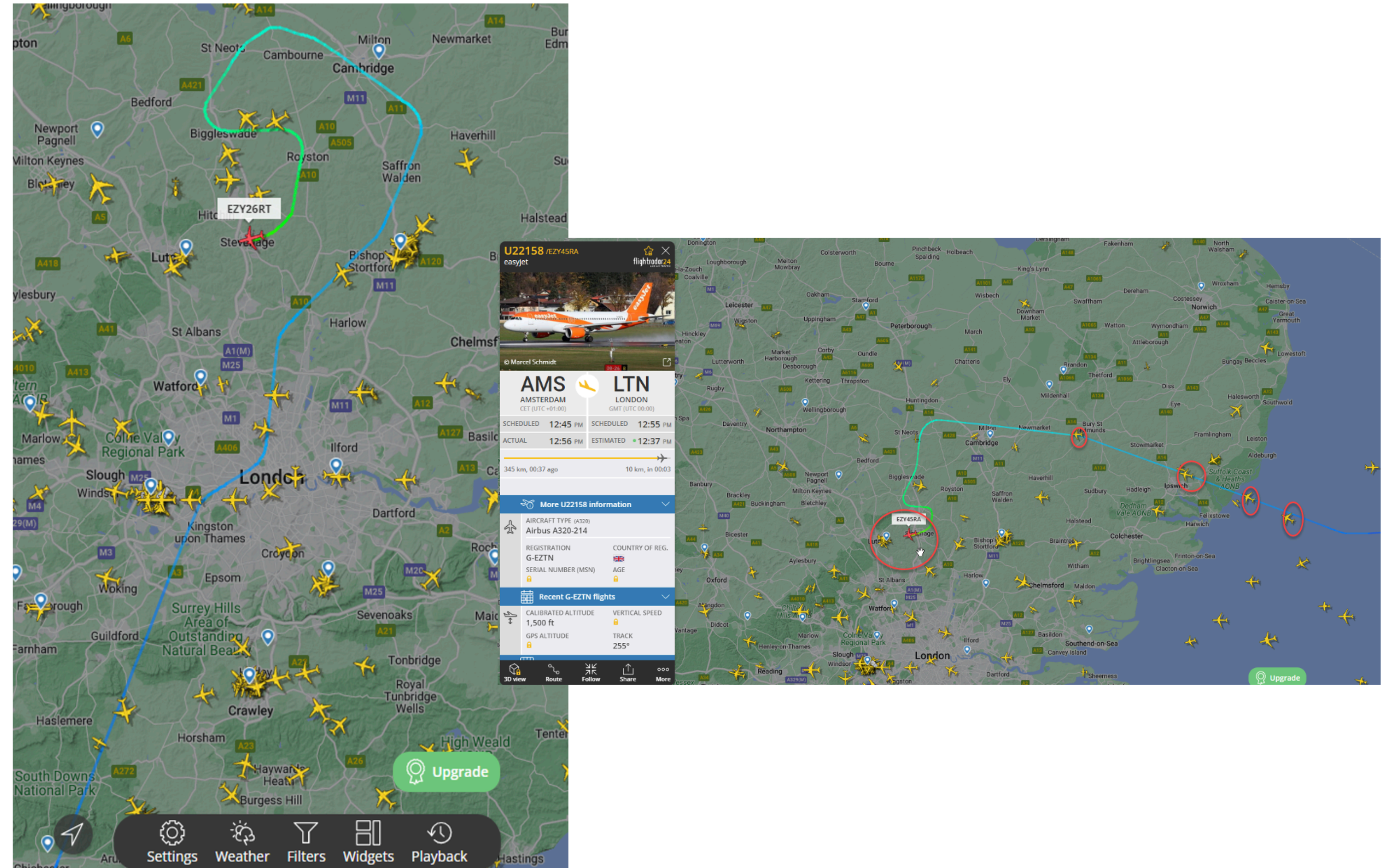
Climate activists have blocked a runway at Hamburg airport, causing numerous flights to be cancelled

13 July 2023

Air travel to double every 15 years” (Air Transport Action Group, ATAG).

CO2 Pollution from AD6 Design

- 900 tons of CO2 emitted over Cambridgeshire between 5 May to 22nd June 2022 (43 days).
- 30% of it is extra emission due extra distances the planes take.
- Bad AD6 design.



Q3 2022 vs Q3 2021 LLA

- Number of passengers roughly doubled
- Night flight also doubled
- Noise complaints reduced x3 times
- Other complaints related to AD6 increased.

Parameter	3 rd Quarter 2022	3 rd Quarter 2021
Total Passenger Number	↑ 4,252,586	1,850,214
Total Aircraft Movements	↑ 34,990	21,725
Night Movements (23.00 – 06.59)	↑ 5,005	2,320
Early Morning Movements (06.00 – 06.59)	↑ 1,276	947
Aircraft Movement and Quota Count limits (per rolling 12-month period)		
Night Quota Movements (9,650 limit)	↑ 8,287	2,988
Night Quota Count (3,500 limit)	↑ 2,703.625	1208.00
Early Morning Shoulder (7,000 movements)	↑ 4,535	1,825
24hr CDA (% achievement)	↑ 94%	93%
Day CDA (% achievement)	↑ 94%	93%
Night CDA (% achievement)	↑ 94%	93%
Track Violations	↑ 19	7
Departure Noise Infringements (Day)	- 0	3
Departure Noise Infringements (Night)	↑ 1	0
Noise Monitor Results*		
No. Day (Night) > 80 dB(A)	- 0 (0)	3 (0)
No. Day (Night) > 75 dB(A)	↑ 1,199 (211)	408 (12)
No. Day (Night) > 70 dB(A)	↑ 9,845 (1,544)	4,809 (823)
Night Noise Contour Area (48 dB L _{Aeq, 8h})	↑ 32.8 km ²	25.6 km ²
Noise Complaints	↑ 6,179	1,858
Complainants	↑ 395	196
Number of New Complainants	↑ 217	78
Largest Source of Complaints	- Arrivals. west	Deps. west
Origin of Concerns (>5 Complainants)	- Harpenden St Albans Cambridge Luton Sandy Knebworth Wheathampstead Potton Leighton Buzzard Hitchin Flamstead Gamlingay Abbotsley Caddington	Breachwood Green Flamstead Harpenden Hitchin Luton St Albans Stevenage Tring Wheathampstead

activities



- RELAS formed in early 2022 - data gathering started
- public meetings held in july 2022 and february 2023 to raise awareness
- guidance was provided on how to, and who to, complain to
- the Facebook group has been growing steadily
- some engagement with councils, MPs and potentially with ministers
- attended meetings with LLA, NATS, CAA, MPs and councils

progress

- adjournment debate held on 9th january to raise AD6 with the aviation minister
 - revise guidance to reflect differing ambient noise levels urban vs rural
 - request CAA to extend the review by a further 3 months
 - request review of CAP1616 process for airspace change for AD6 and future consultations to ensure there is independent analysis once a flight path design is implemented
 - ensure NATS hold to their word and provide the flight movements data as promised at the Arrington meeting on 6th october
 - <https://www.anthonybrowne.org/news/anthony-fights-residents-impacted-flight-path-changes>
- PIR stage 7 has been further **extended to september 2023**
- CAP1616 to be (potentially) reviewed and upgraded

guidance

what can you do...

- residents must complain whenever affected
- complain to your councillors and your MP
- attend public surgeries - make your views known
- call for AD6 to be re-consulted and re-designed or ideally abandoned
- use social media to highlight this creeping menace
- if you have expertise please help
- don't just accept this because
 - you feel you won't be listened to
 - somewhere has to suffer this blight

guidance

how to complain

- guidance can be found on the website and the Facebook group
- do either or both of the following...
 - use the LLA complaints portal at <https://travisltl.topsonic.aero>
 - email noise@ltl.aero - include full name, address, postcode
- we recommend always emailing your councillors AND particularly your MP
- copy emails to CAA and NATS
- explain how the incident has affected you
- use tools such as FlightRadar24 to identify the offending aircraft

guidance

how you can help



- join RELAS Facebook group (<https://www.facebook.com/groups/relas.ad6>)
- see the RELAS website for information (www.relas.uk)
- sign the petition at <https://www.change.org/p/stop-luton-airport-aircraft-noise>
- register for updates with the CAA
- spread the word - family, friends, neighbours
- complain, complain and complain again

key takeaways

- review process runs to **september 2023**
- current flight volumes are “just the tip of the iceberg”
- growth via under-utilised airspace (time) windows and addition of night flights
- we could be subject to 2 aircraft per minute for 21 hours per day
- AD6 is “apparently not a done deal”
- complain and keep complaining - don't assume others are doing this
- this matter rests squarely in the hands of our MPs
 - but they must be encouraged at every opportunity

next steps

actions & desired outcomes

- crowdfunded legal challenge at the end of PIR Stage 7
- impress upon our MPs to seek re-consultation or abandonment
- if reconsulted
 - sponsors must do it properly, fully & completely including ALL those affected
 - materials that can be consumed by the average resident
 - options that are in fact [meaningful] options
 - consultation to be conducted post CAP1616 revisions
 - abandoned until a better design is proposed, tested and accepted - or not at all

guest speakers

Councillor Bridget Smith

District Councillor for Gamlingay & Leader of South Cambridgeshire District Council

Councillor Stephen Ferguson

Independent County Councillor for St Neots East & Gransden

Chair of Cambridgeshire County Council

Councillor Dr Tumi Hawkins

Lead Cabinet Member for Planning, South Cambridgeshire District Council

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questions & answers