

Comments on Project Change 2 : Reduction in the height and change in the purpose of the replacement CARE facility
The management and conservation of resources, and the methodologies of waste management, are increasingly the focus of concern in the area of climate change, such that they are attracting the attention of, and recommendations by, the Committee on Climate Change. An increase in passenger numbers is likely to lead to an increase in climate change impacts through the consumption of resources at the airport and through a corresponding increase of wastes which require to be managed. The airport is, effectively, the size of a small city, and as such we are sure there must be a waste management strategy in place.

What strategy there is must presumably be in the process of change, given the proposal to abandon the quite recently built EfW facility and move waste processing and disposal off-site after an on-site pre-sort. The climate change impacts of this proposal do need to be included in any overall assessment of the proposed changes at Gatwick, particularly as the changes are intended to permit an effective doubling of passenger numbers by the late 2030s.

We take as our starting point Gatwick Airport's online newsletter dated January 17th 2017 on Airport Technology, available to view at <https://www.airport-technology.com/features/featuregatwick-turning-waste-to-energy-5711024/>.

This tells us that in 2016 the airport handled 40.8 million passengers, generating 2,200 tonnes of Category 1 waste, which represented 20% of the total waste. That would mean around 11,000 tonnes of waste in total. The Category 1 waste is dried and consigned straight into the incinerator. The other 8,800 tonnes of waste are sorted, with recyclables being sent for recycling, and those items deemed non-recyclable being dried and turned into RDF pellets for incineration. The incinerator is described as a biomass boiler, but this term is misleading since the non-recyclables almost certainly include a proportion of mixed plastics derived from fossil fuels. Indeed the calorific value of food waste tends to be low, and the energy derived therefore also low, whereas plastics have a high calorific value but also produce large volumes of fossil fuel CO_{2e} when burnt, typically up to 2 tonnes of CO_{2e} per tonne of plastics incinerated. Food waste and biowaste generally is considered to be carbon neutral when burnt, and the overall carbon intensity of RDF (Refuse Derived Fuel) depends on the ratio of biowaste and non-biowaste in the pellets. The Environment Agency works on a 50/50 ratio as a rule of thumb, but this may change as more biowaste is diverted from RDF manufacture.

To make a reasonable assessment of the climate impacts of the proposed increase in passenger numbers, with the proposed change in waste handling, we would expect to see an Environmental Impact Assessment which includes an estimate of the greenhouse gas emissions associated with the entire waste management cycle. We would also hope to see a Waste and Resources Strategy for the airport, benchmarked to 2042, the target date by which the UK government wishes to see residual waste arisings halved, with targets built into that strategy showing how the airport will itself reduce residual waste by half per passenger.

We would expect the EIA to include such information as the following:

- Whether Category 1 and other wastes will continue to be dried at Gatwick before being sorted and moved off-site to other facilities, and if so the GHG impact of such drying treatment.
- Whether non-recyclable waste will continue to be converted into RDF pellets at Gatwick, and if so the GHG impact thereof, plus the estimated ratio of biowaste to non-biowaste.
- Whether all non-recyclables will be incinerated, or some (eg fines) consigned to landfill.
- Whether non-Category 1 biowaste will be sent for treatment other than by incineration, and if so the estimated GHG impacts thereof.
- The approximate distances and GHG impacts of transport of non-recyclables and recyclables to their places of disposal or processing.

Without such data we cannot reasonably estimate the cumulative impact of the airport's expansion, and in particular the expansion of passenger numbers, on the GHG emissions associated with waste arisings. While it may be expected that a near doubling of passenger numbers could lead to a near doubling of waste arisings, 11,000 tonnes to 22,000 tonnes, it is to be hoped that a pro-active waste management strategy, in line with UK government aspirations to halve residual waste, could mitigate that increase in arisings. We would hope that GAL will be mindful of the high carbon impact of incinerating plastic, and indeed of the many negative impacts associated with the manufacture of plastics, and will therefore strive to minimise the amount of single use plastic used and discarded by the many and varied operations within the airport.

We look forward to seeing the Waste Management Strategy and Environmental Impact Assessment as part of the document set to be assessed by the Planning Inspectorate.

In our response to GAL's previous consultation for this change to the DCO, we invited GAL and the North Runway Project Team to consider the research work done Circle Economy, a respected environmental consultancy based in Amsterdam which has worked on projects commissioned by UK local government, Zero Waste Scotland, and many government agencies round the world. In particular we invited study of the Circularity Gap Report 2023 (available at <https://www.circularity-gap.world/2023>), and the 2024 report published on 24 January.

Circle Economy estimates that, to maintain global warming within a 2 degrees Celcius boundary and to keep human life extant within planetary boundaries, resource consumption needs to fall globally by around 30%. At present consumption is rising rather than falling. Though this issue may fall outside the direct remit of the Planning Inspectorate, we would hope that GAL, as responsible corporate citizens, will wish to play their part in achieving the necessary 30% reduction, by planning their own activities accordingly and by seeking to influence the behaviour of their staff and clients – the passengers and freight carriers.

We would welcome open acceptance of the need to live within planetary boundaries by GAL, and discussion of how GAL will contribute to this in the airport's overall strategy and in its Waste Management Strategy.

In the context of Project Change 1: Increase to the design parameters for the North Terminal International Departure Lounge proposed southern extension, we invited the Project Team to consider to what extent the provision of retail space should play a part in reducing consumption and GAL's contribution to that.