

# Electric Planes

**They could be here sooner than we think but might do little for noise.....**

In less than 20 years electric planes could be using our airports. A new report <sup>(1)</sup> from the CAA (Civil Aviation Authority) suggests some short-haul flights could be using electric aircraft by the early 2030s. However, the larger long-haul planes are not expected to be electrified until at least 2050. Electric aircraft would reduce the air pollution and climate emissions coming out of each plane. But there is much more doubt about their noise benefits. The report says “There is still a clear need to undertake noise measurements of the full scale commercial electric planes once they are available to fully understand their noise characteristics” adding “it is still unknown whether the noise exposure from electric aircraft will be an improvement from conventional aircraft.”



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The CAA report identifies the main sources of the potential noise from a fully electric plane. They are the battery systems, the motor and air frame. Early modelling suggests that the planes may be quieter on departure than current aircraft but noisier on arrival. But, because of their batteries, they will be heavy and are expected to climb more slowly after take-off which might off-set any noise gains at source. All of this would be problematic for communities under flight paths. The technology which could clean up the industry could make things worse for them. Communities will be concerned that, driven by the need to cut emissions, the aviation industry may be rushing into a technology which may do little or nothing for noise. It is likely to renew calls for research into other technologies and for demand management measures to be put in place in the meantime.

**CAA report:**

<http://publicapps.caa.co.uk/docs/33/CAP1766EmergingAircraftTechnologiesandtheirpotentialnoiseimpact.pdf>