

How Can Airlines Promote Sustainability?

Globally, the aviation industry is responsible for approximately 2% of all anthropogenic carbon emissions, meaning its environmental footprint is not a negligible one. However, airline companies have become increasingly conscious of the role they must play in curbing their emissions and helping to care for our ailing planet.

Etihad Airways, the UAE-based airline, are leading by example in this respect. Already one of the biggest players in the aviation industry, Etihad have implemented a series of initiatives geared towards promoting sustainability on their flights and encouraging a greener way of flying.

Optimised flight paths

One of the chief methods via which Etihad are committed to sustainability is by ensuring each flight is as efficient and as environmentally friendly as it can possibly be. To achieve this goal, the airline has teamed up with Boeing to launch its EcoDemonstrater and Greenliner programmes, geared towards collecting as much information about the aircraft's performance as possible and tweaking it to ensure optimum efficiency.

On one recent ecoFlight, for example, Etihad followed an optimised route profile for both the outgoing and return flights to and from Dublin. By employing techniques of optimised climb and continuous descent, they were able to reduce the flight time by 40 minutes, slash fuel consumption by 800kg and bring down CO² emissions by as much as two tonnes compared to a standard Boeing 787.

Compared to the same route on a different aircraft 12 months ago, the benefits were even more pronounced. The ecoFlight consumed eight tonnes less fuel and emitted 26 fewer tonnes of carbon dioxide, demonstrating how the EcoDemonstrator programme is highly effective in action.

Fuel, noise and waste

As well as optimising the entirety of their routes to ensure as little energy is consumed as is possible, Etihad are also committed to using more environmentally friendly fuel sources. The <u>search for sustainable jet fuel</u> has been ongoing for some time now, but Etihad have struck upon an equal blend of biofuels and traditional fuel sources which is a capable of reducing emissions by as much as 80%.



What's more, their EcoDemonstrator flights are equipped with sensitive monitoring technology which is capable of detecting how noise levels are affected by different ambient conditions. Armed with that knowledge, the engineers at Etihad can then ensure aircraft noise is kept to a minimum, thus mitigating the disruption to the lives and lifestyles of both humans and animals in the vicinity of the flightpath.

Finally, Etihad is also committed to reducing the amount of plastic waste generated on its flights. Prior to April 2019, the carrier routinely used more than 100 single-use plastic items on its flights, but that month it became the first airline in the world to operate a route without any disposable items at all. Since then, Etihad have pledged to reduce their consumption of single-use plastics by 80% by 2022, compared to April 2019.