

Gatwick completes its main runway resurfacing works

- A Monitor Desk Report

Date: 08 October, 2022



London Gatwick Airport, part of VINCI Airports' network, has just completed (Sept 2022) an innovative plan to resurface its main runway in half the time and for half the cost – while saving significant amounts of embodied carbon¹ by using 70pc less asphalt – compared to traditional resurfacing methods.

The airport's original plan to resurface its main runway in 2020 was halted by the pandemic. COVID-19 however was a catalyst that saw London Gatwick Airport draw up new plans that have just delivered a much more sustainable solution for the minimum practical budget.

The rethink saw the airport break from traditional methods by resurfacing only the most 'trafficked' parts of its main runway – where aircraft land and exit – as other sections were shown to still have seven to ten years of expected life.

Again, shifting from traditional approaches – where sections of the old runway surface is replaced with two layers, laid over two nights – a resurfacing technique was developed that saw both layers laid in a single night – saving time.

Combined, this new approach saw 40,000 tonnes of asphalt laid – 100,000 tonnes less than normally used when resurfacing the airport's main runway. This meant the project could complete in just six months – half the normal time – and for 50% less cost than normal.

The reduction in asphalt allowed a significant saving of embodied carbon – which is the Green House Gas emissions associated with materials and construction

throughout the life-cycle of the infrastructure – consistent with VINCI Airports’ environmental commitment.

All of the old asphalt material was recycled as aggregate in road construction, and a temporary on-site asphalt batching plant reduced lorry travel distance and emissions.

Alasdair Scobie, Capital Delivery Director, London Gatwick Airport, said: “The pandemic gave us the time and reason to rethink our original design. We think we have achieved the best balance possible between cost, operational constraints and durability, whilst reducing the environmental impact of construction. The cost savings can now also be reinvested in improvements across other parts of the airport.

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