



netzero

Sustainability comes to airfreight

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Net Zero pathway: Three majors pillars to decarbonisation

We play a vital role in the decarbonisation of our industry

The transition to net zero represents a tremendous opportunity for Rolls-Royce

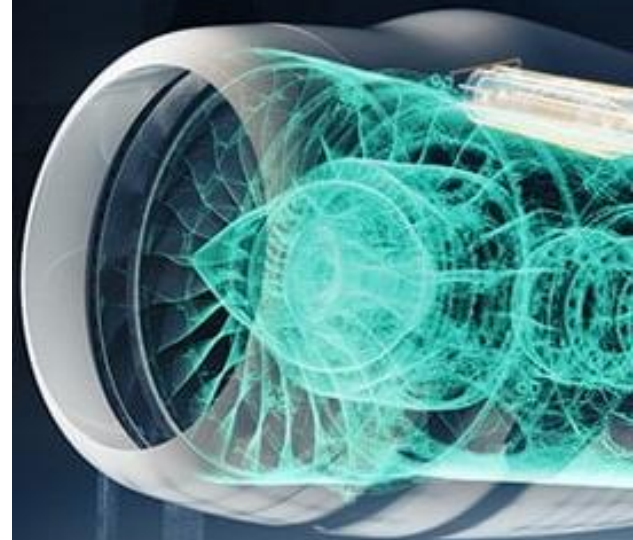
Step change in efficiency of gas turbines



Leading SAF demonstration and adoption



Developing third generation technologies



Enhanced integration at platform level

Manufacturing, Digital and Services technologies



500m tonnes of fuel per year is expected to be consumed by our industry by 2050

130K tonnes of SAF is expected to be produced in 2022

several thousand SAF manufacturing facilities will be needed in order to meet this demand by 2050

Currently <100 exist

5 airports currently have regular SAF distribution but this number is growing

~5% of airports handle ~90% of flights
SAF availability at a small number of airports could cover a large share of demand

more and more countries are starting to introduce SAF mandates on in-country fuel uplifts
This will help to stimulate the SAF economy and drive demand



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Key SAF activities and targets



UltraFan demo



747 FTB



Engine dev & pass-off



SMR & PtL



MRTT



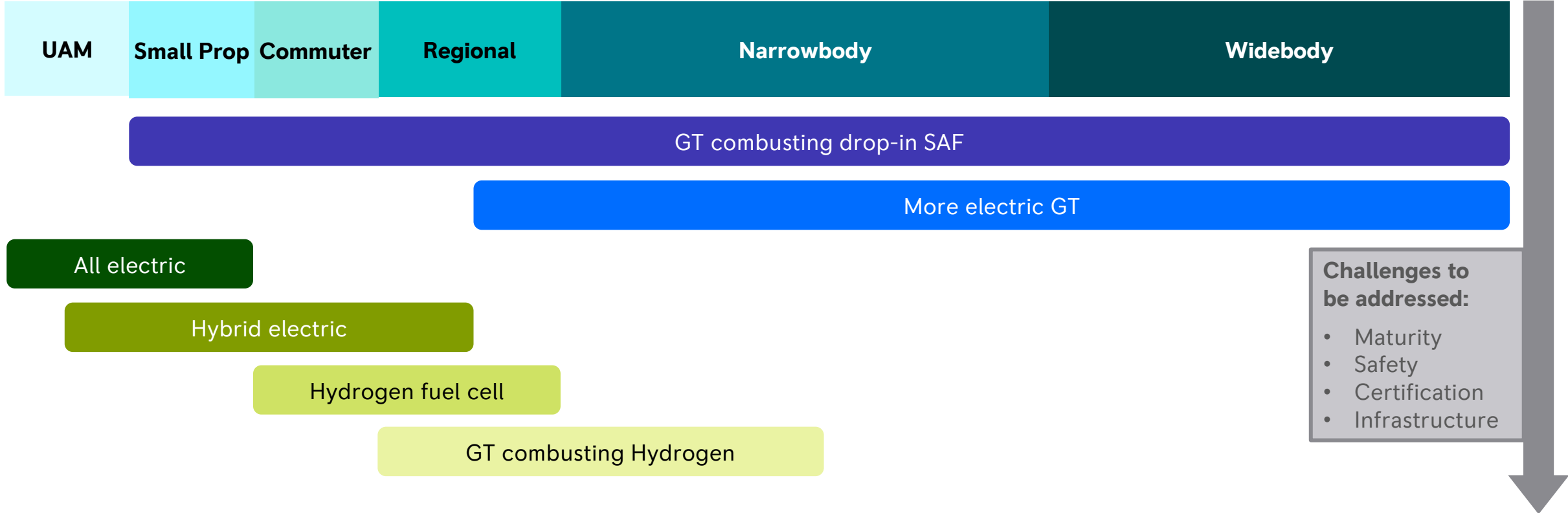
SAFinity



ECLIF

All our in-production Commercial jet engines are in the process to be proven compatible with 100% SAF

By 2023, 10% of the fuel we use in Civil Aero test and development will be replaced by SAF



Electric powered aircraft already feasible for very short ranges, offering zero carbon and new mobility models

SAF and GT (gas turbine) will be required to power most applications, particularly larger, longer-range aircraft, without more radical designs

Novel solutions including hydrogen could offer zero carbon solution for shorter range operations



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