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The GTL Consortium





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The History



Synthetic jet fuel agreement signing ceremony at the Dubai Airshow in 2007



© AIRBUS S.A.S. 2006

Successful trial on 1st Feb 08 of GTL jet fuel for Airbus A380 on a flight from Filton to Toulouse



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The historic GTL flight





- Qatar Airways operated the world's first commercial flight utilizing a fuel blend with 50% GTL jet fuel
- The flight, QR 076 took place on October 12, 2009 from London-Gatwick to Doha, State of Qatar
- The flight was conducted with an Airbus A340-600 powered by four Rolls Royce Trent 556 engines
- The aircraft, A7-AGC had all four engines supplied with the new fuel
- The flight lasted six hours and carried 240 passengers and cargo. Passengers have been notified in advance
- The flight was accompanied by Qatar Airways CEO, Mr. Akbar Al Baker and senior executives from the consortium
- 90,000 liters of fuel was boarded in a 50/50 blend with GTL and conventional jet fuel



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Facts about GTL Jet Fuel





- **What is GTL Jet Fuel?**

GTL or Gas to Liquids Jet Fuel is a blend of standard oil derived JET A-1 kerosene and up to 50% GTL kerosene. GTL jet Fuel is the name of blends of up to 50% of Gas to Liquids kerosene with conventional crude oil-based kerosene. GTL kerosene is the FIRST aviation fuel component derived from natural gas and has obtained the ASTM approval and meets all the standard jet fuel specifications.

- **What is the history of GTL kerosene?**

The GTL kerosene component of the GTL Jet Fuel is a middle distillate product synthesized through the Fisher-Tropsch process. This process was developed by German scientists in the 1920s and refined by Shell's proprietary development. Fisher-Tropsch is the process of chemically converting syngas into syncrude.

Shell has conducted over 30 years of research in this field and has unparalleled experience from its low temperature GTL plant in Bintulu, Malaysia



- **What are the benefits of GTL Jet Fuel?**

GTL Jet Fuel offers airlines access to an alternative feedstock to oil-based conventional fuels. This diversity of supply for the industry – gas based rather than oil based – will add high quality drop-in blend component to the global jet fuel pool for many decades to come. Due to its higher thermal stability it features a lower fuel burn by approx. 2%.

GTL Jet Fuel has the potential to improve air quality around busy airports because it burns with near zero Sulphur dioxide emissions (SoX) and substantially lower particulates (very fine soot particles). First indications also show a lower overall fuel burn. GTL fuel has also a much lower density of 0.74 compared to conventional jet fuel which is around 0.80-0.82. GTL burns no aromatics.

- **When will GTL Jet Fuel become available?**

Construction of the Pearl GTL is planned to be completed by the end of 2010 with project ramp-up then taking 12 months. GTL Jet Fuel will be available by 2012 with an annual production of 100 Mil. tons, enough to carry 250 passengers around the world 4000 times.



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What is next? GTL to BTL

Launch of the Qatar Advanced Biofuels Platform (QABP), Jan. 10, 2010





- **Background**

Build on the GTL Consortium experience together with national entities, Airbus and Rolls Royce

Exhaustive feasibility and economical study in 2009

Find a variety of sustainable biofuel feedstock's that can be home grown

Engage national entities in the research and development of sustainable biofuel such as Qatar Science and Technology Park, Qatar University

Establish a new academia and research field in Qatar

- **The Goal**

100 % synthetic jet fuel by 2014 based on 50% GTL and 50% BTL to ensure sustainable growth and development of Qatar Airways



The Oryx Flies Green

Qatar Airways' commitment to a sustainable future

Thank you !