



# Alternative Fuels in Qatar Airways

***“A view from the airlines’ perspective”***

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## About Qatar



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**Area:** 11,437 km<sup>2</sup>

**Population 2008:** 1.4 million

**GDP per capita:** \$29,400

**GDP Growth rate:** 7.1%

**Unemployment rate:** 3.2%

**Weather:** arid; mild, pleasant winters; very hot, humid summers

**Inflation:** 7.2%

**Visitors:** 1 mil. in 2008, 1.5 mil. In 2010

**Oil/ Gas:** Third largest natural gas reserves





## Qatar Airways Facts



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- **Began operations in 1997 with four aircraft**
- **Serves 78 passenger and 17 cargo destinations, carrying around 10 million passengers a year**
- **First airline to pass IOSA in 2003 with a 100% compliance**
- **Fleet of 65 ultra-modern aircraft & over 200 aircraft on order worth USD 30 billion**
- **Average fleet age is just 3 years**
- **An average year-on-year growth of 35% for the past 10 years**



## Qatar Airways Highlights



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- Opened a USD 90 million premium class terminal at its home base in Doha
- New Doha International Airport under construction, to be opened by 2011, a USD 9 billion investment. A masterpiece in environmental engineering
- Launched a new nonstop service to JFK in 2008 alongside Washington with Houston to follow by the end of March 2009
- One of only six **\*\*\*\*\* Star** airlines in the world
- The only **\*\*\*\*\* Star** airline in the Middle East





# Qatar Airways & **The Environment**



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- **Qatar Airways already operates a modern fleet with low noise, CO2 and NoX emissions**
- **We have over 200 next gen aircraft on order that meet even the most stringent emission requirements**
- **We implemented a wide-ranging fuel efficiency program in late 2007 for all departments**
- **In Nov. 2007, Qatar Airways, Qatar Fuel & Petroleum, Airbus, Rolls-Royce, Shell Petroleum Company established a consortium to study benefits of Synthetic Jet Fuel**
- **The State of Qatar just appointed its first ever Minister for Environment & we have pledged a very close cooperation in all fields, the first in the GCC**
- **But despite the riches of natural resources and currently lower fuel prices, the State of Qatar and Qatar Airways have a MISSION!**



## Our Mission



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**We have the responsibility to deal with the impact on global climate change, noise, local air quality, non-renewable resources and waste. With that we have a direct economical impact on global climate change and environmental costs as well as a direct and indirect economic impact on society.**

**Therefore we have to go beyond the current industry best practices in order to continuously adapt to the ever changing business, political and social environment and with that to ensure a sustainable future for the airline, its staff and its neighborhoods.**

**The research and study of synthetic fuel is one of those initiatives.**



# The Way Forward



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- We move from “program” to corporate & national culture
- Qatar Airways currently establishes its dedicated department for integrated fuel optimization which includes IFM and a dedicated alternative fuels roadmap, environmental affairs and corporate social responsibility
- We are committed to being in the forefront of alternative fuels development for commercial aviation
- We will shortly launch our innovative and comprehensive corporate strategy for environment and corporate social responsibility
- Our goal: ***Carbon Neutral Growth***



# The Synthetic Jet Fuel Consortium



# Trial Flights



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- **GTL Jet fuel blended with conventional kerosene used on 1<sup>st</sup> Feb 2008 on Airbus A 380 test flight from Filton to Toulouse**
- **Qatar Airways will make available one of its state-of-the-art A340-600 for a commercial trial flight will during the second half of 2009**

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# Expectations



- **Blend ratios from 35% up to 50% GTL Kerosene are being tested**
- **Improved engine performance from better thermal stability thus permitting hotter engines**
- **Potential fuel economy (higher specific energy, lower density), improvement in payload range due to overall lower fuel consumption**
- **Product approval targeted for 1<sup>st</sup> half 2009**
- **GTL contributes to the ‘Diversity of Supply’ of jet fuel to the aviation industry by creating a performance fuel component from non-crude oil feedstock**
- **But we are just at the beginning of the road.....!!**



**Together for a sustainable future in aviation!**

**Everyone has a part to play!**

**Thank you!**

