

## “Powering tomorrow engines”

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Abstract

Key Words: aeronautical engines, LPT

The civil aviation industry is an industry that shows promising growth scenarios in the medium to long term, despite the global crisis but desperately needs to innovate in order to preside over the Western primacy in this field.

Competitiveness and environmental sustainability are the main drivers on which GE Aviation is focusing on innovation. Technological challenges for aeronautical propulsion are well captured sticky notes for every engineers: reduced costs of the product and manufacturing processes over the entire life cycle and study and development of new engine architectures with low environmental impact, characterized by a significant reduction in emissions of CO<sub>2</sub>, NO<sub>X</sub> and noise emissions. The propulsion is one of the systems that require a "step change" in technology to meet ACARE goals to reduce consumption and emissions. Objectives, inter alia, made even more challenging by ACARE vision 2050 (2050-Flighpath Goals to take ACARE beyond 2020).

In all this scenario, leadership in technologies innovation is becoming a discriminating element in order to get access and success in the global market. The following notes will provide a brief overview of the path, difficult but rousing, along thru GE Aviation moves to green the propulsion Era.

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