

# *International Coalition Panel*

## - Introduction -

**Prof. Juergen Raps**

**President**

**Alternative Aviation Fuels Pavillon at ILA Berlin Air Show 2014**

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# Projected fleet growth until 2032

AIRBUS	2012	2032	Veränderung
RPK (in Mrd.)	5,5	13,9	151%
Passagierflugzeuge	16094	33651	109%
Frachtflugzeuge	1645	2905	77%

Quelle: Airbus Global Market Forecast 2013

BOEING	2012	2032	Veränderung
RPK (in Mrd.)	5,5	14,6	165%
Passagierflugzeuge	18580	38430	107%
Frachtflugzeuge	1730	2810	62%

Quelle: Boeing Current Market Outlook 2013

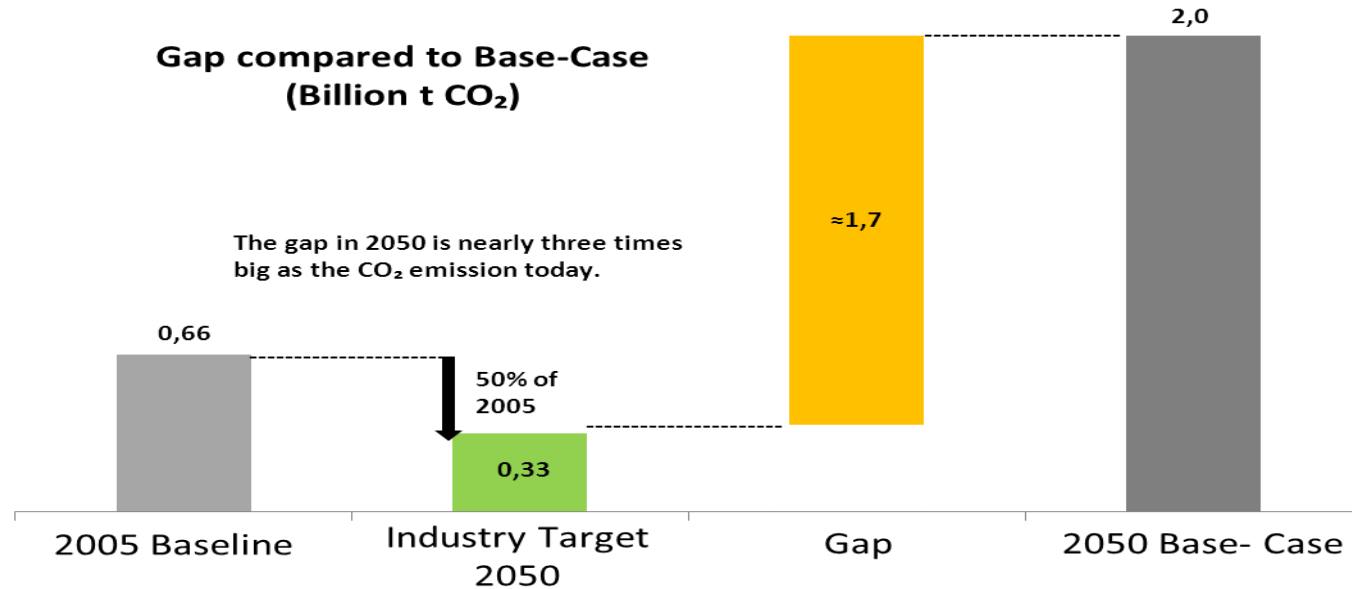


## Aviation grows at 5% p.a. until 2032

- Current estimates show that in the next 20 years 30.000 (Airbus estimate) or 35.000 (Boeing estimate) new commercial airplanes will be delivered to their customers
- Their market value will be about \$ 4.4 billion (Airbus) to \$ 4.8 billion (Boeing)

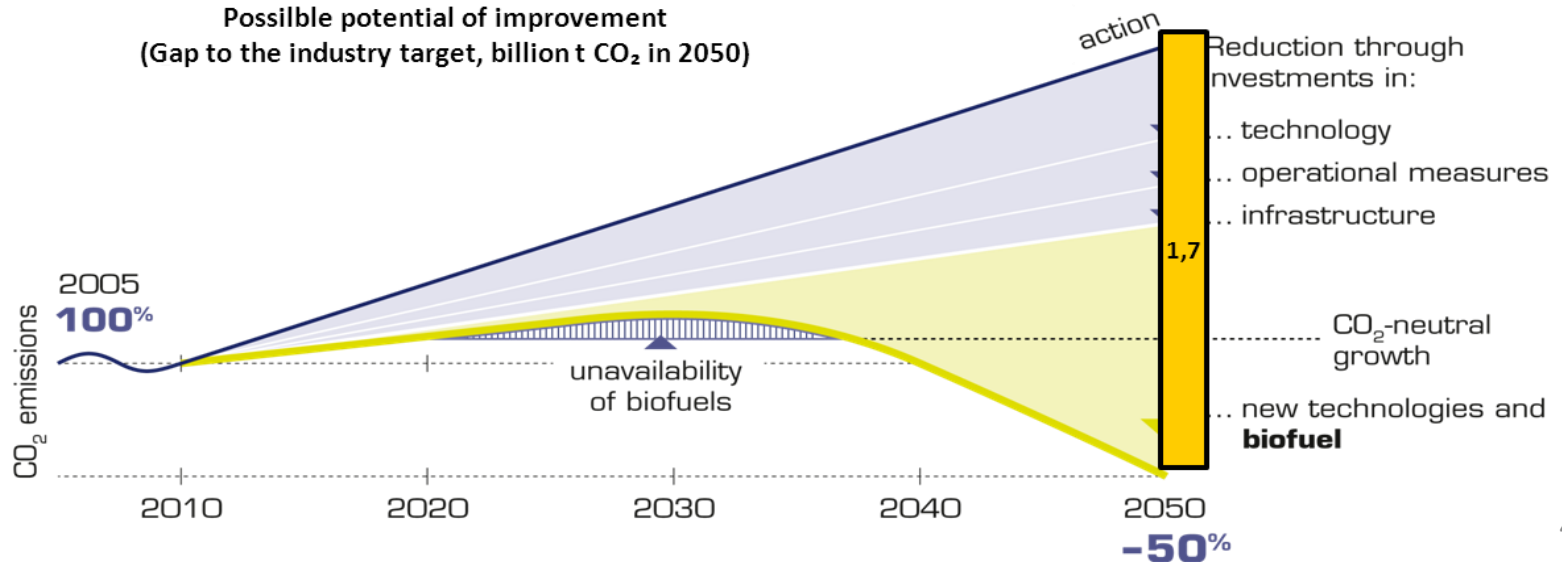
# Ambitious target

To reach the emission reduction goals of aviation, CO<sub>2</sub> emissions must be reduced by 1,7 billion tons annually by 2050.



# Emissions reductions require alternative fuels

- Fossil fuels are finite
- Efficiency measures are not sufficient to reduce CO<sub>2</sub> emissions as planned.
- Aviation is depending on hydrocarbons
- Therefore alternative fuels are economically and ecologically useful



## Four Pillar Strategy to reduce emissions from aviation (IATA)

1

### Effective Operations

Drive for maximum efficiency and minimum weight

- flight scheduling
- flight routing
- engine-wash
- others

2

### Improved Technology

Development of new technologies

- engines
- airframes
- **biofuels**

3

### Efficient Infrastructure

Improve

- air routes
- ATM and
- airport procedures

4

### Economic Means

Incentives to finance technology R&D, carbon offsets & trading like ETS

Successful implementation depends on industry commitment and political support alike!