



Air transport's response to climate change challenge

ACI/WB Annual Aviation Symposium, London
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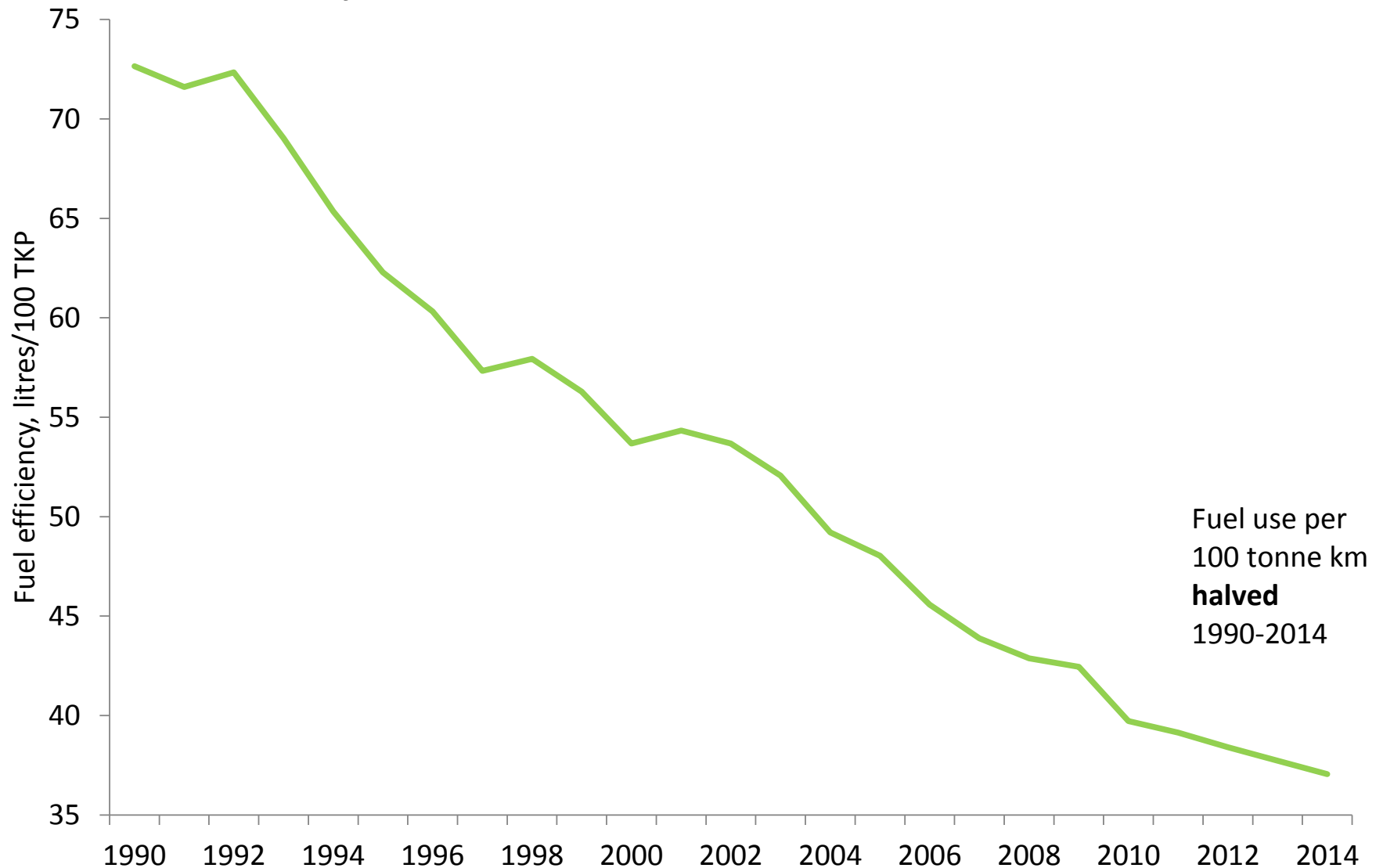
www.iata.org/economics

To represent, lead and serve the airline industry



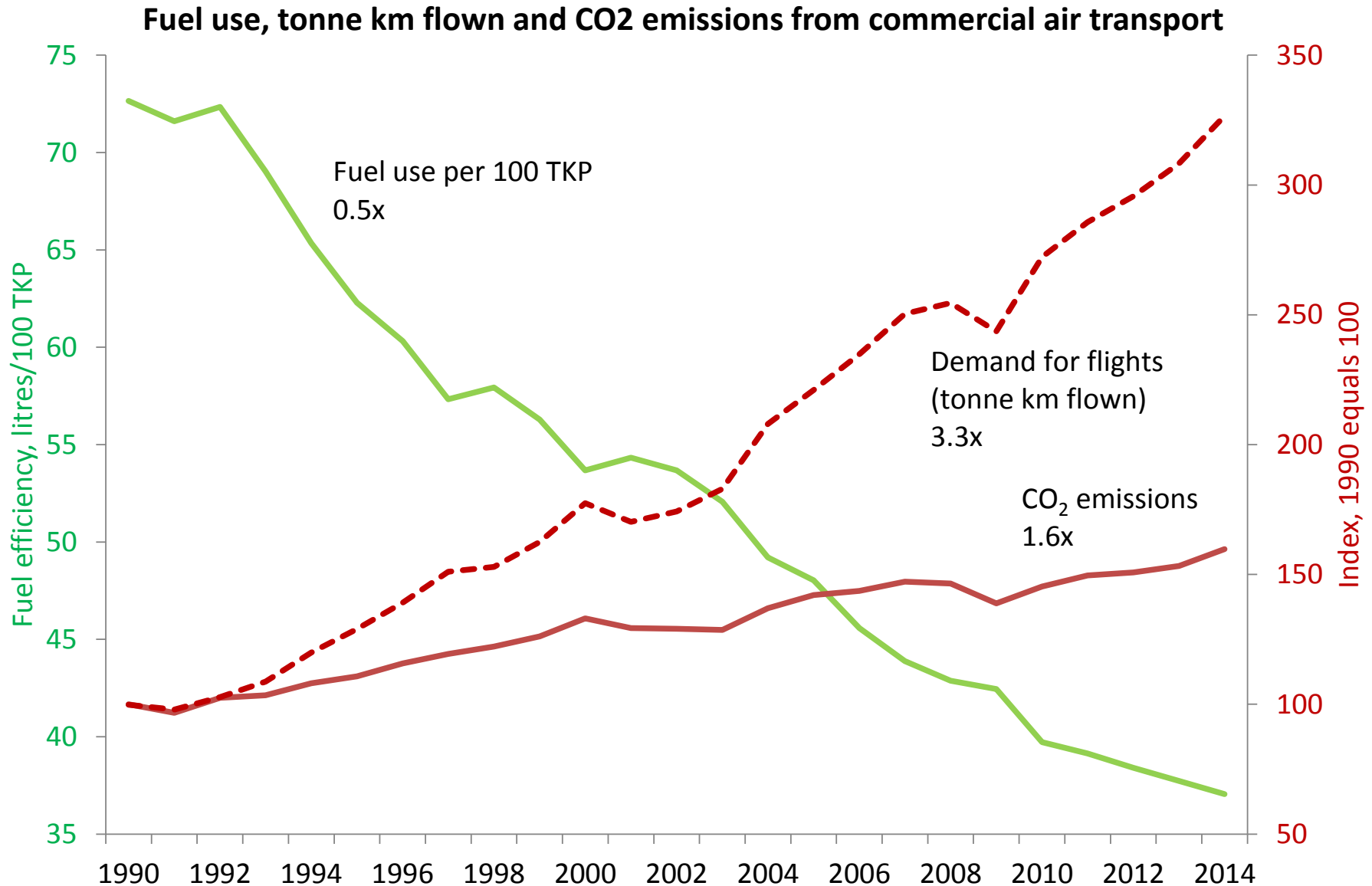
Excellent fuel efficiency track record

Fuel efficiency of commercial airlines worldwide, litres/100 tonne km flown

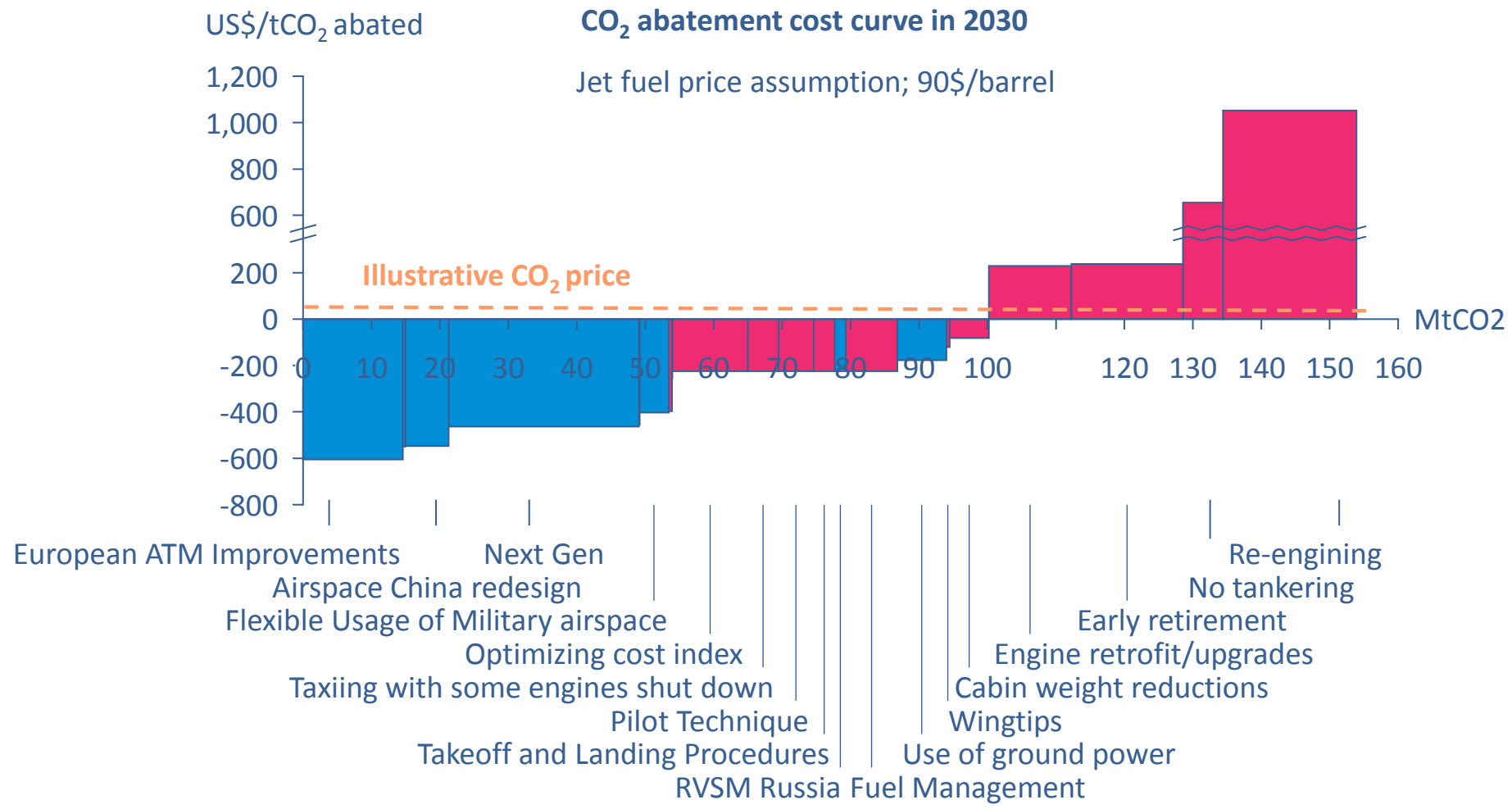


Fuel use per
100 tonne km
halved
1990-2014

Challenge is very strong demand for air transport



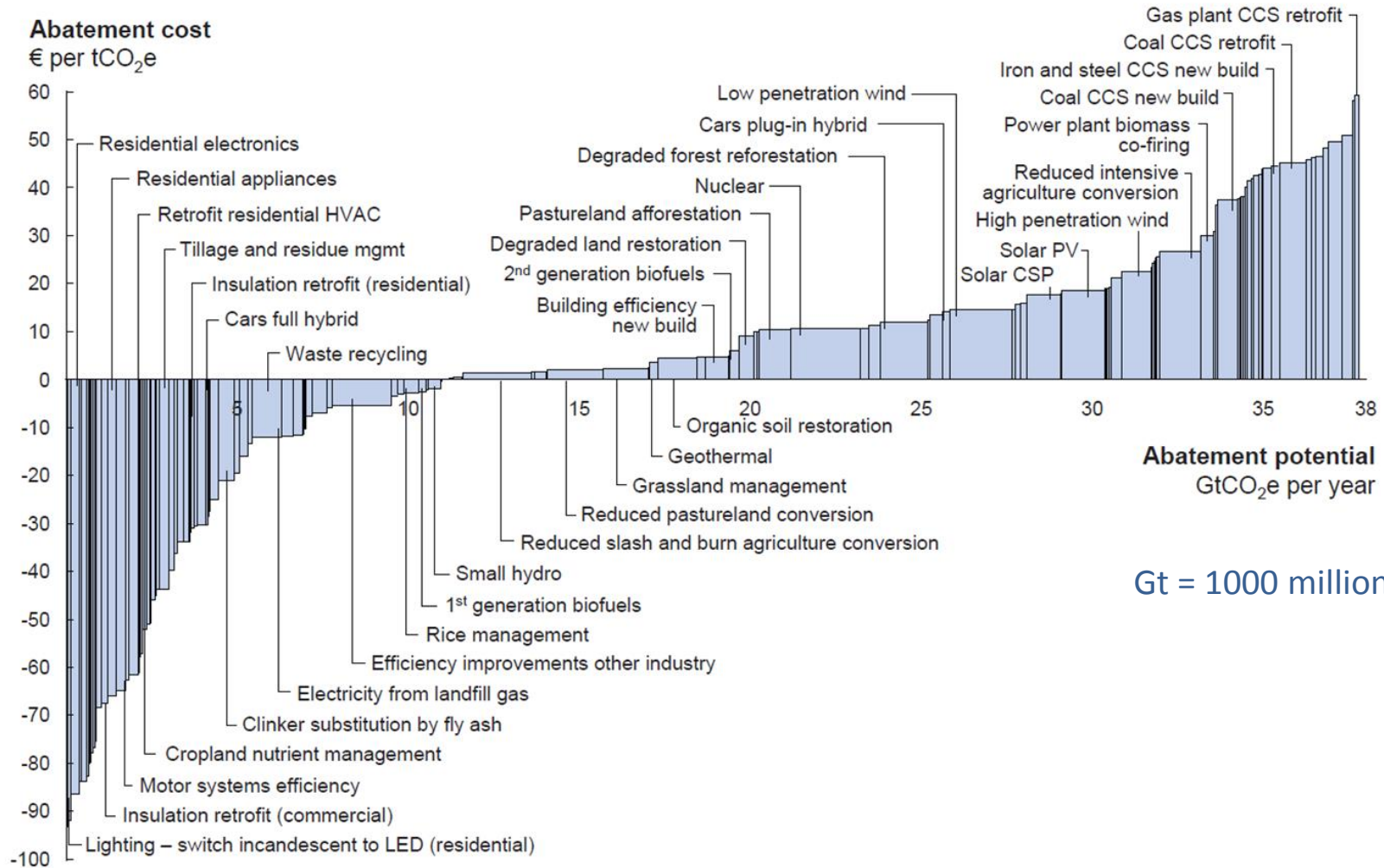
The economics of CO₂ abatement within aviation



Source: McKinsey & Company, IATA

Much cheaper to abate outside air transport

Global GHG abatement cost curve beyond business-as-usual – 2030

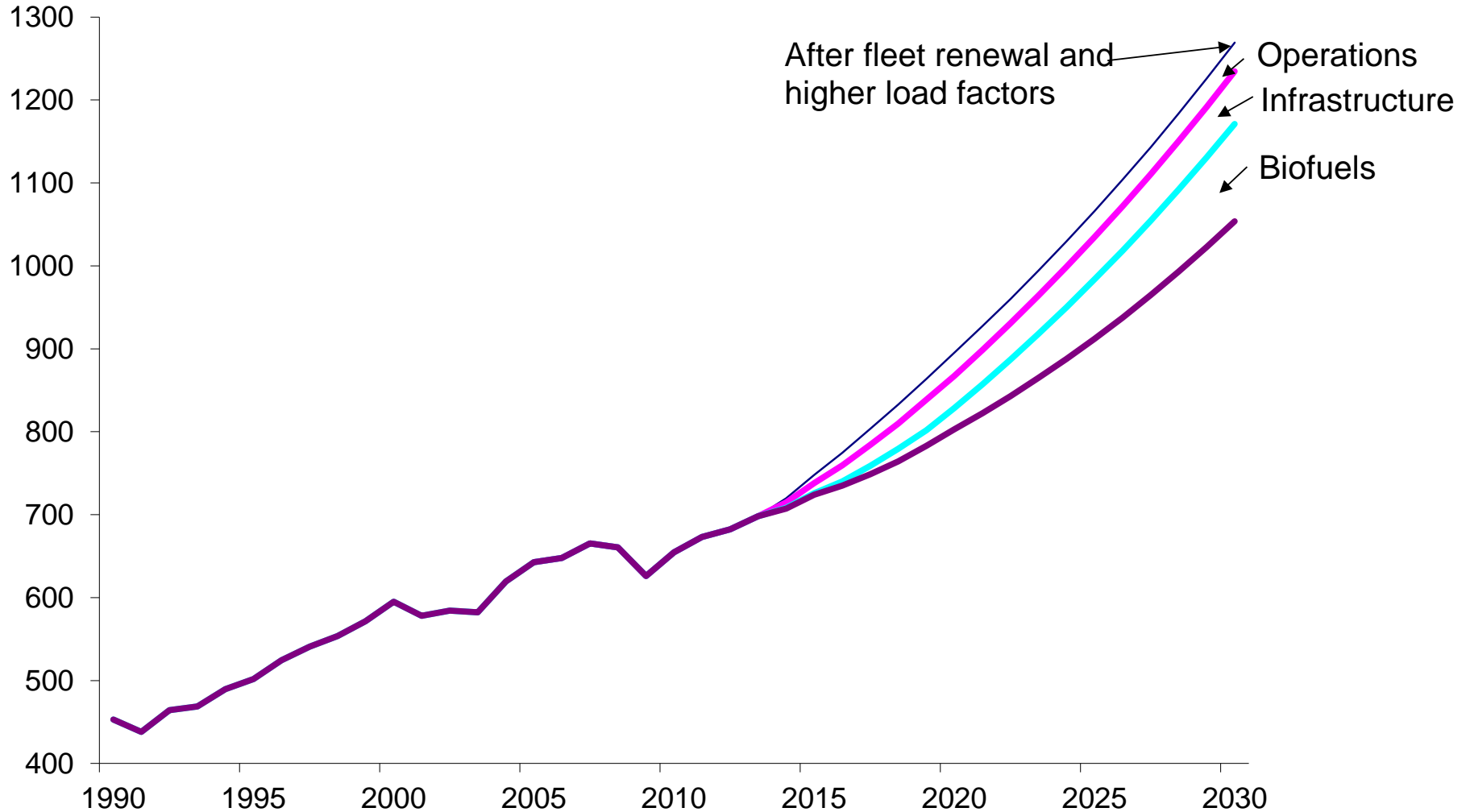


Gt = 1000 million tonnes

Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO₂e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.
Source: Global GHG Abatement Cost Curve v2.0

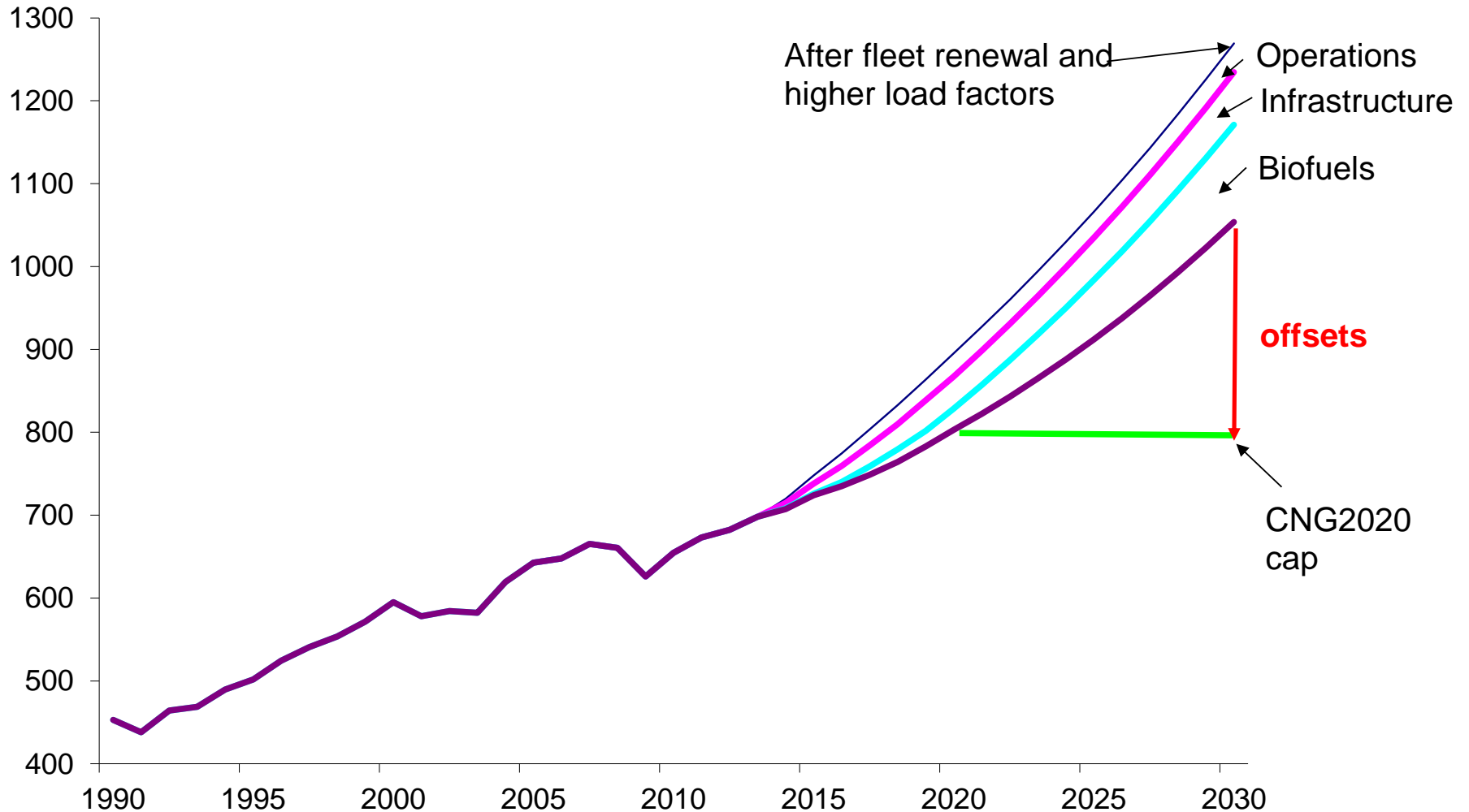
Within-sector abatement slows CO₂ growth

Worldwide CO₂ emissions from commercial air transport, mT per year



CO₂ cap will be met by investing in cuts outside

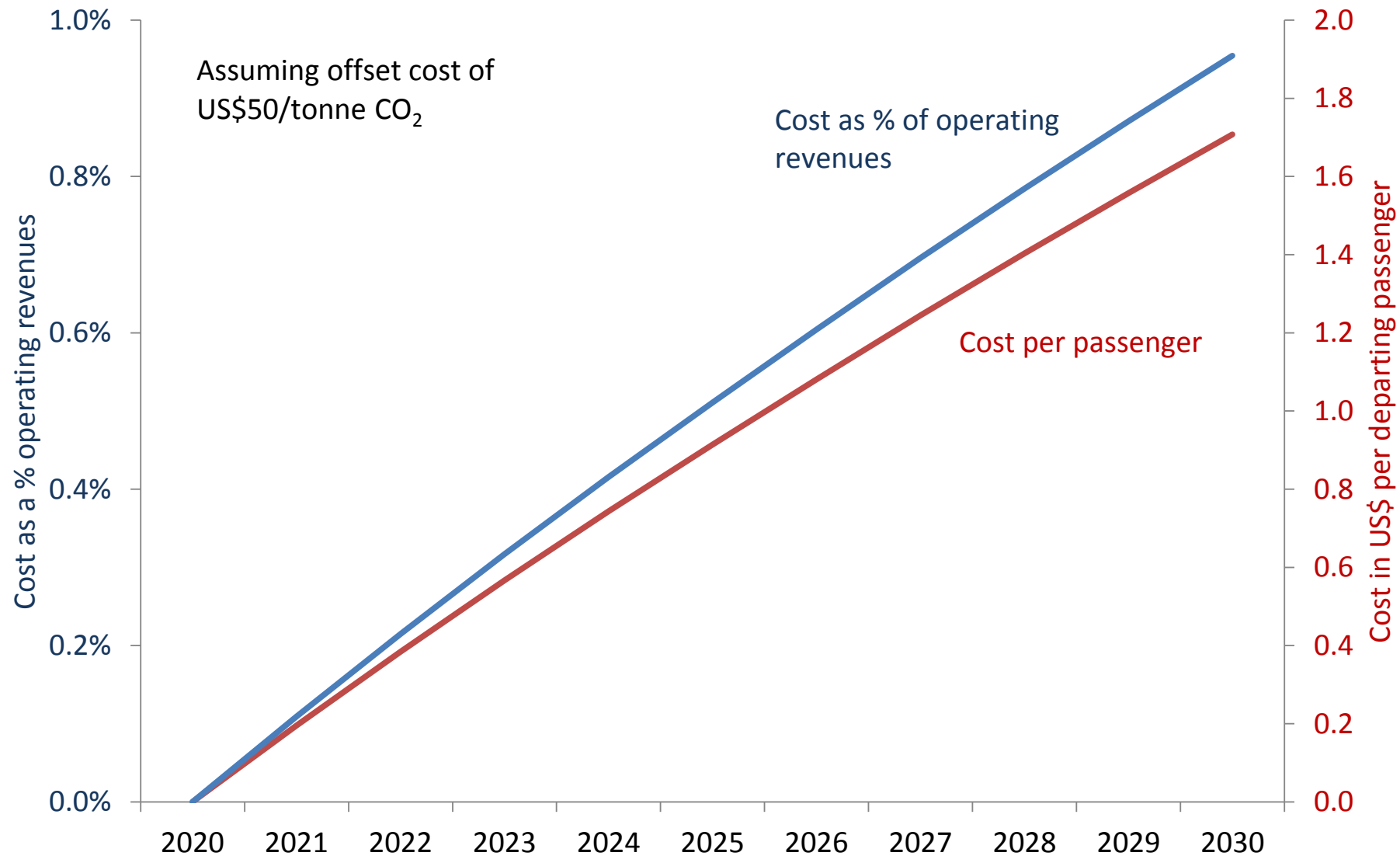
Worldwide CO₂ emissions from commercial air transport, mT per year



Note: Offsets and CNG2020 cap shown here for system wide emissions are illustrative. ICAO global MBM will cover international. Domestic covered by Kyoto.

Cost of investing in offsetting CO₂ cuts low but rising

Cost of offsetting to meet 2020 CO₂ cap



Source: IEA, ICAO, IATA Carbon Model

Note: Cost numbers illustrative only and based on CO₂ price assumption

Global air transport industry climate action plan



**GLOBAL
GOALS**



**PILLARS OF
CLIMATE ACTION**

Three industry goals...

1.5%

**IMPROVEMENT IN
FUEL EFFICIENCY
PER YEAR**



**STABILISE NET CO₂
EMISSIONS FROM
THE SECTOR AT**

2020

**LEVELS THROUGH
CARBON-NEUTRAL
GROWTH**



-50%

**CO₂ EMISSIONS
FROM AVIATION BY
2050 (2005
BASELINE)**



Four pillars of climate action

TECHNOLOGY

(INCLUDING SUSTAINABLE
ALTERNATIVE FUELS)

OPERATIONS

INFRASTRUCTURE

GLOBAL MARKET-BASED MEASURE

Working to develop a global market-based measure

2009: industry presents Governments at ICAO with climate plan.

2013: Governments agree to develop global MBM for sector.

Currently: parties at ICAO are undertaking political and technical work to design MBM for agreement at 2016 ICAO Assembly and implementation from 2020.



ICAO (governments) Global Market Based Measure

To implement a cap on international net emissions from 2020

- Cap-and-offset looks most likely
- ICAO's High Level Group replaces Environment Advisory Group
- Debate over distribution of obligations
 - Emissions share (collective) or growth (individual)
 - Early-mover, growth, new entrant complexities or simplicity
 - Developed vs developing (special treatment: CBDR /SCRC)
 - Operator vs phased-in routes
 - Exclusions
- October 2016 Assembly deadline for agreement