

Keeping the skies friendly ■ Giovanni Bisignani

## Aviation and global warming

**I**s aviation a major contributor to global warming? Is it the fastest growing source of greenhouse gas emissions? Hyperbole characterizes the debate on aviation and climate change. Who to believe? Politicians? Environmental activists? Airlines? Scientists?

So let's look at the facts. And let's take them from the world's most authoritative body on this issue, the UN's Intergovernmental Panel on Climate Change (IPCC).

The IPCC estimates that aviation today is responsible for 2 percent of global CO<sub>2</sub> emissions with a total climate change impact of 3 percent. These figures have remained largely unchanged over the last two decades, despite the growth of air traffic.

Projecting forward to 2050, the IPCC has aviation at 3 percent of global CO<sub>2</sub> emissions and 5-6 percent of climate change impact. We are and will remain a small part of the big problem of climate change.

Nonetheless, aviation's carbon footprint is growing, and that is politically unacceptable for any industry. The challenge is to keep the many benefits of aviation — unprecedented global mobility that supports 32 million jobs and \$3.5 billion worth of economic activity — while eliminating its negative impacts.

The solution is not to return to the days when flying was reserved for the well-to-do by making it artificially expensive with even more taxes. Punitive economic measures like emissions trading will not have a big impact on aviation's environmental performance.

With 28 percent of costs coming directly from fuel, the airline industry has the strongest incentive of any industry to keep fuel consumption low. Positive measures — tax credits to encourage faster re-fleeting or grants to fund alternative fuel research — would deliver better results.

Unilateral European proposals to include aviation into its emissions trading scheme have put economic measures at the center of a political debate, partially fueled by the approaching Kyoto deadlines. But regional initiatives are no way to solve a worldwide issue.

A meeting currently taking place in Montreal is our best opportunity for a global solution. Government leaders responsible for civil aviation are meeting at the Triennial Assembly of the International Civil Aviation Organization (ICAO). Environment tops their agenda.

If emissions trading is going to be imposed on air-

lines, we must make sure it is effective. The ICAO needs to work towards a global emissions trading scheme that states could implement on a mutual consent basis. This is what the drafters of Kyoto had always envisaged.

But the industry is pushing governments for much

loftier goals. In June, I proposed a vision for the industry to aim for carbon-neutral growth in the medium-term and to develop zero-carbon emissions technology within 50 years.

Since then, I have met with aircraft manufacturers, engine makers, fuel suppliers and airlines. Nobody has all the answers, but no one said our goal was impossible.

On the contrary, it is absolutely achievable. Remember, this is the industry that went from the Wright Brothers to the jet age in just five decades.

The critical question is: How do we turn the vision into reality?

The first part of the answer is efficiency. It is the best way to take us to carbon neutral growth. Airlines are investing billions of dollars in new, more fuel-efficient aircraft. In the last four decades, fuel efficiency increased 70 percent and will improve a further 25 percent by 2020. Better air traffic control, including straightening air routes, and more efficient operations can reduce fuel burn by 18 percent.

Unfortunately, politics often gets in the way of good common sense. Uniting Europe's skies offers the biggest single opportunity to improve aviation's environmental performance. But after 15 years of talks, a Single European Sky is still just an idea. This political failure results in 12 million tons of unnecessary carbon emissions each year.

The second part of our vision is technology. It is the only way to zero emissions. Quite simply we need to build better planes and more efficient engines powered by non-carbon sources. Some potential building blocks already exist — solar power, hydrogen cells and biofuel.

The world's airlines — IATA's 240 members — are committed to the vision. Manufacturers are aligned. All are working hard. It is now time for governments to come on board. Through ICAO, governments must set challenging but realistic targets in two important areas. First we need targets to improve air traffic management and eliminate unnecessary fuel burn. Then we need technology targets in a roadmap.

This will provide regulatory certainty to back major investment decisions by manufacturers and airlines. So, please, less hyperbole and more concrete actions.

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