The aviation sector perfectly illustrates why the world needs an integrated approach to the social, economic and environmental dimensions of sustainable development and why it must shift to an inclusive green economy that can underpin them.

The sector supports some eight million jobs and eight per cent of the global economy, bringing important international market access to developing nations, relief aid to crisis zones and research data to scientific communities. However, the demand for air transport continues to double every 15 years, with around six billion passengers a year expected by 2030. While we know the sector already accounts for two per cent of man-made CO₂ emissions, we don’t yet understand the full environmental impact of all emissions, technologies and materials, including some of those being used to replace chemicals being phased out in line with the latest environmental regulations.

ICAO has already played a crucial role in supporting sector-wide efforts to reduce the fuel burn and CO₂ emissions of air transport operations by more than 70 per cent and noise by more than 75 per cent in the last 40 years. It will be just as crucial in redoubling those efforts to ensure sustainable development by further improving fuel efficiency by two per cent per year and achieving carbon neutral growth from 2020.

Some of the mechanisms to achieve this, which are highlighted elsewhere in this report, are already gathering momentum. However, UNEP can see several potential areas to help governments, authorities and various private sector industries rapidly improve environmental performance and reduce the impact on climate change.

For example, scaling up new generation sustainable biofuels and other alternative energies, like fuel cells and solar power, would reduce emissions from air and ground operations, while decarbonizing the economy and encouraging investment in newer, more eco-efficient aircraft; full deployment of available technology such as the SESAR and NextGen systems for air traffic management, in the context of ICAO’s Global Air Navigation Plan would cut emissions, noise and congestion; and accelerating the research, development and safe implementation of new technologies, such as additive layer manufacturing and biomimicry structural designs, would reduce environmental impact of existing air transport networks and support the transition to a more integrated multi-model system.

In fact, a new report from IATA and SEO Amsterdam Economics Research indicates that even just improving air traffic management - even just in Europe - could boost the economy by some EU245 billion by 2035¹, while tripling capacity and reducing environmental impact by 10%. Not only could that support sustainable development on many fronts, but much of the transition could potentially be funded by reinvesting the estimated $7 billion a year the sector pays in emissions related taxes and charges.

Such examples provide just a small taste of why the ten links between ICAO’s Strategic Objective on environment and the 2030 Agenda also offer considerable opportunities for the transport, energy, building and financial sectors.

I hope this report will encourage public and private sector decision makers to strengthen policies for energy, infrastructure and education; to encourage regulatory, financial and industrial co-operation; and to ensure that wider access to the benefits of aviation allows social, economic and environmental progress go hand in hand.

References