

Global aviation is a driver of sustainable development, bringing together people, businesses and communities and supporting trade and tourism.

Safe, reliable, efficient and cost-effective air transport is an essential component of a broader mobility strategy to help achieve the United Nations 2030 Agenda for Sustainable Development.

Supporting the spirit of the Sustainable Development Goals (SDGs) should be seen as an imperative by governments and aviation businesses the world over.

The global aviation sector has a role to play in 15 of the 17 SDGs, some in small ways and others with much more significant influence. This report provides suggestions for how individual aviation industry organisations can contribute – they will need to identify the specific SDGs that are most appropriate to their own circumstances.

## Setting goals for a changing world

The vital role of mobility and air transport in supporting global development trends

Human history has been marked by societal and demographic shifts often taking place over century-long timeframes. However, the changes taking place now will occur in mere decades, as the pace of technological development speeds up and whole economies and regions respond to new opportunities and challenges. Connectivity and mobility are both drivers and responders to these trends. It is important, therefore, to look at how the world will change in the coming years.

It is estimated that the world's population, now around 7.6 billion, will grow to 9.8 billion by 2050¹. The urban / rural split is more evident than ever before. Over half the world's population now lives in cities, with that proportion due to grow to 66% by 2050². This brings with it challenges and opportunities – more concentrated populations allow for improved efficiency of mobility and energy supply. However, it also means these cities will need to be careful about the quality of life they can provide their citizens. It could also create inequality of public transport access for rural populations.

The world's economic centre of gravity continues to shift eastward and south as the powerhouses of Asia build global strength and emerging economies in Latin America and Africa gain from trade and development. Interestingly, the centre of gravity of global air traffic closely mirrors the broader economic trends.

Rising middle classes in Asian nations, in particular, will seek to travel more and benefit from the connectivity that air travel brings. Already, Asia-Pacific has overtaken North America and Europe to become the largest aviation market in the world. Consumers there will continue to seek new opportunities and take advantage of their increasing ability to travel. Africa and Latin America, too, are rapidly developing and many people across Africa will be able to make leaps forward in technology to provide improved mobility, if governments prepare the groundwork in an expedited fashion.

Within nations as well, attitudes are shifting. The famous millennial generation expects to travel more often and more easily, whilst also prioritising environmental and social awareness – a characteristic defining both the passengers and employees of air transport operators and businesses everywhere.

An industry as proudly technologically-advanced as aviation will also be subject to changing dynamics. Increasing artificial intelligence and disruptive technology such as remotely automated systems – drones – becoming part of the landscape (or, more accurately, airspace), our industry will also need to adapt quickly.

Despite the changing fortunes of many around the world, there remain challenges to development: pulling millions more out of poverty; providing clean habitats; fostering innovation; building stable societies; taking care of an aging population with increased life expectancy; dealing with climate change; and with the advent of more automation, finding different ways for entire segments of society to spend their days.

### The Sustainable Development Goals

To help navigate these changing times and ensure that parts of society are not left behind by the pace of development, in 2015, the world's governments, through the United Nations, agreed on the 2030 Agenda for Sustainable Development. This Agenda is framed by 17 overarching Sustainable Development Goals (SDGs), which aim to set priorities and stimulate action over the next fifteen years in areas of critical importance for humanity and the world: people, planet, prosperity and peace.

These are not simply goals for the United Nations system to follow, but a framework for aligned action across all parts of society and the global community. Business, in particular, has a big influence on how many of the goals can be realised, but will also benefit once they are achieved. Business thrives in stable societies with healthy and prosperous citizens, open borders and strong institutions. At the same time, there is an obligation on all companies and industrial sectors to consider not just profit maximisation in business strategy – indeed, the SDGs provide an ideal template, not only for stable and sustainable growth but for sound corporate strategy as well.

The goals define 169 targets that governments are encouraged to pursue and a set of 'indicators' which allow for the tracking of progress towards those targets and the overall goals.

### Transport's role in sustainable development

Without fast and efficient mobility, the world we know today would not exist. Transportenabled trade and modern connectivity have a fundamental role to play in modern lives, in business and beyond. Transport is a key component of meeting the SDGs. Whilst there is no stand-alone SDG on mobility, former UN Secretary General Ban Ki-moon acknowledged the catalytic power of the sector and formed a High Level Advisory Group on Sustainable

Shift in geographic centre of gravity for economy and air traffic





Transport to look at how transport could help deliver the SDGs. The group developed a set of ten recommendations to promote wider access to safe and efficient mobility:

- Make transport planning, policy and investment decisions based on the three sustainable development dimensions

   social development, environmental (including climate) impacts and economic growth and a full life cycle analysis.
- Integrate all sustainable transport planning efforts with an appropriately-balanced development of transport modes: integration vertically among levels of government and horizontally across modes, territories and sectors.
- » Create supportive institutional, legal and regulatory government frameworks to promote effective sustainable transport.
- » Build technical capacity of transport planners and implementers, especially in developing countries, through partnerships with international organisations, multilateral development banks, and governments at all levels, to ensure equitable access to markets, jobs, education and other necessities.
- » Reinforce efforts toward preventing road traffic deaths and injuries.
- » Foster an informed, engaged public as a crucial partner in advancing sustainable transport solutions.
- » Promote diversified funding sources and coherent fiscal frameworks to advance sustainable transport systems, initiatives and projects.

- » Increase international development funding and climate funding for sustainable transport.
- » Promote sustainable transport technologies through outcome-oriented government investment and policies that encourage private sector investment and action through various incentive structures.

These recommendations fed into the 2016 Global Sustainable Transport Conference in Ashgabat and then into a cross-UN effort that is now being formed, Sustainable Mobility for All (SuM4All). This initiative brings together UN agencies, multilateral development banks, NGOs, academics and industry to chart a way forward for mobility that follows a vision of:

- >> Universal access to ensure social equity in access to opportunities;
- **Efficiency** to increase the efficiency of transport systems and services;
- Safety to improve the safety of mobility (SDG target 3.6 on road safety);
- » Green shifting transport services and infrastructure to a green, clean and resilient path.

### Aviation's unique perspective

Much of the discussion on mobility is focused on ground transport for understandable organisational reasons. Urban mobility – road infrastructure, rail systems, cycling infrastructure and bus networks – are all very heavily reliant on government intervention and coordinated policy, whereas aviation in many cases is self-sufficient. In many developing nations, however, there may need to be some policy intervention to ensure infrastructure development for wider access to air services.

The global aviation industry is aligned with the aims of the 2030 Agenda for Sustainable Development. Analysis shows that the global air transport industry plays at least some role in supporting 15 out of the 17 SDGs. Through generating connectivity between nations, aviation is a key driver of economic and social development. Aviation also has one of the most clear and wide ranging climate action plans of any global industry, which contributes to the environmentally-focused SDGs.

Whilst aviation already plays a major role in supporting and complementing the SDGs, simply as a matter of its day to day operations, there are areas in which the industry could increase its contribution to sustainable development. By working in partnership with governments and inter-governmental institutions, air transport could significantly further its already important role in driving sustainable development.

Over half of all international tourists travel to their destination by air and tourism plays an even more important role in some states than in others, with 45 out of 47 least developed countries identifying tourism as a key development sector<sup>3</sup>.

### **Supporting states in special situations**

Of particular interest to the global community is assisting the development of countries in so-called 'special situations'. These states have been identified as needing assistance due to geographic or climatic conditions and were identified in several special processes, including the Istanbul Programme of Action for the



Least Developed Countries (LDCs), the Vienna Programme of Action for Landlocked Developing Countries (LLDCs), and the Samoa Pathway for Small Island Developing States (SIDS).

To help communicate the benefit of improved connectivity through aviation development, the International Civil Aviation Organization (ICAO) has teamed up with the Air Transport Action Group (ATAG) and several UN agencies in the Aviation Partnerships for Sustainable Development initiative.

### Partnership for sustainable development

The SDGs are not going to be achieved without collaborative efforts by governments, with businesses and civil society all working together. Luckily, aviation is very experienced in working in partnership to set and achieve system-wide goals. In safety and security, and most recently climate change, air transport at a global level has followed the day-to-day operational philosophy of working together for the benefit of all, including with a well-connected network of suppliers. When it comes to meeting the SDGs, we will need to also work with governments and other partners to ensure the greatest benefits.

Our most enduring global partnership is with ICAO, a specialised United Nations agency with a unique role: to help set global standards for this most global of industries. ICAO has also undertaken analysis of how its organisational strategy supports the SDGs<sup>4</sup>.

Aviation is vital for the broader tourism industry as well, with the sector contributing heavily to world economic development. The United Nations World Tourism Organization estimates that the sector accounts for one in every 11 jobs and 30% of global services export income <sup>5</sup>. The United Nations General Assembly earmarked 2017 as the International Year of Sustainable Tourism for Development, a recognition of the cross-cutting nature of tourism and the need for sustainable growth in what will be an even more important industry in the future. The International Year is being structured into five key themes which also encompass the SDGs:

- » Inclusive and sustainable growth
- Social inclusiveness, employment and poverty reduction
- » Resource efficiency, environmental protection and climate change
- » Cultural values, diversity and heritage
- » Mutual understanding, peace and security

### Driving sustainability through economic growth

A number of the SDGs, including SDG1 (no poverty), SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities) have a focus on economic development and are in many ways interconnected. These are areas in which aviation already makes a significant contribution, but increased cooperation with governments can unlock further economic potential and support sustainable development. In some regions of the world, unnecessary and burdensome regulations remain in place, hurting competitiveness and suppressing the consequential social benefits of better air links.

In Africa, governments could support the sustainable development of the sector by agreeing to a policy of open skies, which would not only aid economic development, but would greatly increase airspace efficiency and safety. Rather than continuing an arrangement of individual bilateral agreements between each state, African governments should agree on a more liberal approach to the continental airspace through adoption of the Yamoussoukro Decision, a policy that has long been on the negotiating table and that has the full support of the industry.

In Latin America, the main barrier to economic sustainability is the lack of appropriate infrastructure, which in turn suppresses capacity and connectivity. As much of the infrastructure in this region is state-owned, there is significant scope for industry to collaborate with governments in the region to develop the infrastructure needed to meet future demand in a sustainable manner.

Around the world, the wider tourism sector can also create opportunities for people in remote

areas and for indigenous communities and play a role in actually protecting the natural habitats and animals that bring visitors. Such development must be carefully managed to safeguard cultural and natural attractions whilst also providing value and growth prospects for all participants. Challenges remain: overcrowding of historic and cultural sites, resource allocation, education and development for local populations, equitable sharing of financial benefits, and working conditions are all areas where thoughtful action is needed. However, well-planned and executed tourism can provide a much more sustainable future than many traditional primary and industrial sectors.

### Sustainability reporting and regulation

Increasingly, states and investors are asking businesses to report on sustainability actions and areas quite outside the normal day-to-day operations of most aviation partners. From legislation requiring reporting on actions to combat human trafficking, to regulations on disclosure on all aspects of corporate and social responsibility (CSR), reporting requirements are already becoming more granular. For an aircraft operator doing business in multiple jurisdictions worldwide, compliance with each state's individual system can be burdensome. Investors, too, are starting to seek detailed disclosure from many listed companies of the climate change risks to their businesses.

A proactive approach in these areas is encouraged as these requirements are only likely to increase over time. This can be through individual initiative or via a body such as the UN Global Compact, Global Reporting Initiative, or Task Force on Climate Related Financial Disclosures.



### **Using this report**

This report is a snapshot of how aviation currently supports the sustainable development of societies through the prism of the SDGs. Aviation has a global role in supporting aspects of 15 of the SDGs. For each of these, we have identified some of the sub-targets and indicators that could be relevant to air transport.

A small selection of actions already underway by the aviation sector is expanded on the ATAG website www.aviationbenefits.org/SDGs.

We have also identified some ideas of how individual aviation organisations can play their unique role and where governments can help boost sustainable air transport.

Aviation's role is different across the SDGs. In some of them, the SDG is fully relevant to our sector . In others, we have broad influence, or the SDG is relevant to the actions of the aviation sector . For the remaining few, we have limited direct involvement, but can provide a support function to other sectors or actions . In two of the SDGs . , the goal does not always have a direct aviation element, however, some aviation partners may find them particularly relevant (because of their local situations, or the destinations they serve) and so we have also included those examples in this report.

This report should be seen as a guide to how aviation partners can use the SDGs as a framework for their own sustainability planning, but it is just a guide. Airports, airlines, air navigation service providers, manufacturers and the many thousands of other partners throughout the supply chain must look at their own unique circumstances and assess how they can best serve the future of the industry, their workforce, their customers, their communities and the planet.

### AVIATION AND THE SUSTAINABLE DEVELOPMENT GOALS

			Direct relevance to 'global' aviation
İ	1: NO POVERTY	End poverty in all its forms everywhere	
<b>***</b>	2: ZERO HUNGER	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	
<b>-</b> √	3: GOOD HEALTH AND WELLBEING	Ensure healthy lives and promote well-being for all at all ages	
	4: QUALITY EDUCATION	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	
	5: GENDER EQUALITY	Achieve gender equality and empower all women and girls	
V	6: CLEAN WATER AND SANITATION	Ensure availability and sustainable management of water and sanitation for all	
	7: AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for all	
	8: DECENT WORK AND ECONOMIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	
	9: INDUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	
	10: REDUCED INEQUALITIES	Reduce inequality within and among countries	
	11: SUSTAINABLE CITIES AND COMMUNITIES	Make cities and human settlements inclusive, safe, resilient and sustainable	
00	12: RESPONSIBLE CONSUMPTION AND PRODUCTION	Ensure sustainable consumption and production patterns	
	13: CLIMATE ACTION	Take urgent action to combat climate change and its impacts	
	14: LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
	15: LIFE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	
Y	16: PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	
	17: PARTNERSHIPS FOR THE GOALS	Strengthen the means of implementation and revitalise the global partnership for sustainable development	

### **SDG1**: NO POVERTY

### End poverty in all its forms everywhere

ALTHOUGH AIR TRANSPORT HAS A LIMITED ROLE TO PLAY IN HELPING THOSE LIVING UNDER EXTREME POVERTY, IMPROVED CONNECTIVITY CAN HELP BUILD ECONOMIC DEVELOPMENT TO LIFT STANDARDS OF LIVING. AVIATION DIRECTLY CREATES JOBS IN THE INDUSTRY, AS WELL AS OTHER SECTORS INDIRECTLY, PROVIDING 62.7 MILLION PEOPLE WORLDWIDE WITH THEIR LIVELIHOODS.

IT IS ALSO ESTIMATED THAT 54% OF INTERNATIONAL TOURISTS TRAVEL TO THEIR DESTINATION BY AIR, HELPING TO SUPPORT EMPLOYMENT IN THE TOURISM INDUSTRY. REMITTANCES (MONEY SENT HOME TO DEVELOPING COUNTRIES BY CITIZENS WORKING OVERSEAS) ACCOUNT FOR VITAL FOREIGN INCOME IN MANY STATES. THE WORLD BANK ESTIMATES AROUND \$479 BILLION IS SENT IN REMITTANCES EACH YEAR – THE LINKS HOME MADE POSSIBLE THROUGH RAPID AIR TRANSPORT.

#### From the SDGs: relevant targets

**1.4)** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

**1.a)** Ensure significant mobilisation of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.





- » Turboprop aircraft manufacturer ATR prides itself on the versatility of its aircraft to reach remote communities, opening up routes that are not suitable for larger jet engines, but vital for the people that can be connected by air services.
  \$\text{\text{www.atraircraft.com}}
- » The Virgin Atlantic Foundation invests in communities in Africa, India and China through the WE villages programme, where they invest in long-term development and alleviate poverty.
  \$\text{http://bit.ly/2f5eBXw}
- Brussels Airlines has set up the bfoundation, which focuses on alleviating poverty in Africa.
   http://bit.ly/2fLh9xK
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Establish financial, in-kind and expertise links with organisations helping to promote poverty reduction in regions to which your company has a connection (supplier locales, destinations, areas with long-standing political and cultural ties).
- » Ensure that your supply chain is encompassing opportunities for purchasing from local small and mediumsized enterprises in LDCs, LLDCs and SIDS where possible (whilst also taking into account working conditions of those suppliers).
- Support, advertise or partner with pro-poor sustainable tourism initiatives and projects – especially in developing regions or exotic destinations.

- » If you have operations in developing states, ensure outreach by employees to local communities and links with education establishments.
- » Highlight agencies and projects that reduce poverty in company communications (in-flight magazines, etc).
- » Through the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (and voluntary carbon mechanisms such as ACI's Airport Carbon Accreditation) commit to offset CO<sub>2</sub> emissions by using projects that have clear poverty reduction co-benefits.
- » Work with local governments to encourage skills training for staff close to airport facilities.
- » Manufacturers can work with customer airlines to utilise space on board aircraft delivery flights to ferry educational or community supplies.

### How governments can assist

Promote air transport as a key driver for economic development by prioritising aviation infrastructure development in remote communities.

Positive economic incentives should be developed for aviation companies to operate routes and set up business in states in special situations.

States should ensure that aviation and tourism are part of their development plans by mapping and prioritising their requirements for assistance and capacity building, in line with the SDGs.

### **SDG2:** ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

AVIATION PROVIDES NEEDED CONNECTIVITY FOR PERISHABLE AGRICULTURAL PRODUCTS EVERY DAY. IN ADDITION, AVIATION SUPPORTS THE DELIVERY OF VITAL HUMANITARIAN AID TO AREAS DEVASTATED BY NATURAL DISASTERS AND WAR, THROUGH THE WORLD FOOD PROGRAMME AND OTHER CHARITIES. AVIATION HAS A UNIQUE ABILITY TO MOVE NEEDED ITEMS QUICKLY OVER VAST DISTANCES.

### From the SDGs: relevant targets

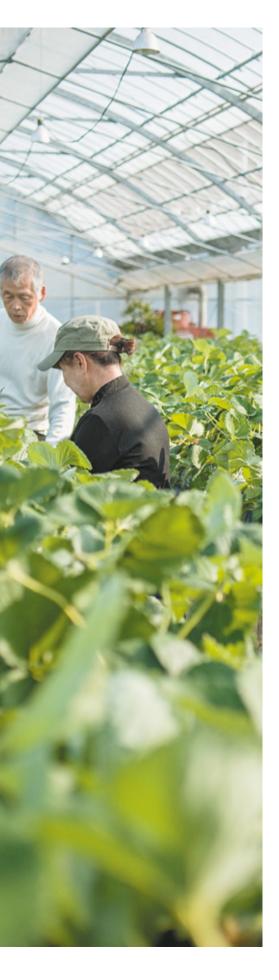
2.1) By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

**2.b)** Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.

### From the SDGs: aviation-relevant indicators

**2.4.1)** Proportion of agricultural area under productive and sustainable agriculture [specifically relating to possible crop-based sustainable aviation fuel feedstock production]





- » The UN World Food Programme coordinates the UN Humanitarian Air Service to quickly and safely transport vital food supplies to areas struck by war or natural disaster.
  \$\times\$ http://bit.ly/1TKpmPl
- Brisbane Airport contributes to the OzHarvest project, which collects unwanted food from Australian organisations, by donating leftover food produced by airlines.
   http://bit.ly/2aub05T
- » The Airbus Foundation partners with humanitarian organisations, such as Action Against Hunger and the UN World Food Programme to deliver food aid to areas hit by famine.
  \$http://bit.ly/2sFZm1L
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Airlines can investigate options for allowing passengers to choose their meals before they fly, reducing over-catering, or research passenger preferences to determine how to cut down on unused items (for example, some airlines are not routinely putting salt and pepper on every catering tray, but making them available if requested).
- » Companies can investigate options for donating left over food items to local charities for re-distribution.
- » Businesses can establish links with organisations working to reduce hunger

- in developing states, raising money (and awareness) through education, fundraising drives, or providing corporate donations.
- » Aviation companies can work with organisations such as Airlink<sup>7</sup> to deliver critical food and relief cargo to areas in need. Ideally, this will be well-coordinated between partners to ensure the right supplies get to the right locations in the quickest time. Air transport operators should remember that the crisis does not conclude when the TV cameras depart, but that often long-term recovery logistics are just as important.
- » Ensure that the search for sustainable aviation fuels uses feedstocks that do not negatively impact on food supply, land that could be used for food, or water resources.

### How governments can assist

Two key impediments to reducing food waste on board aircraft (or redistributing leftover food from both airlines and airports) are legal issues. Currently, most states require waste from international flights to be destroyed for quarantine reasons when in reality there is very little risk from the food on board or its packaging. Allowing recycling of catering supplies could also ensure that any untouched pre-packaged food could be re-distributed (and any waste appropriately recycled). Similarly, by instituting so-called 'Good Samaritan' laws<sup>8</sup>, appropriate airline or airport catering leftovers could be donated for use by charities.

## **SDG3**: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

A KEY FOCUS IN THIS SDG FOR MOST MODES OF TRANSPORT IS AROUND SAFETY. AVIATION HAS A STRONG TRACK RECORD, DEVELOPING A ROBUST SAFETY CULTURE THAT HAS EXTENDED THROUGHOUT THE INDUSTRY. WHILST WE CAN NEVER RELAX IN THIS AREA, IT IS SOMETHING THAT THE WHOLE AVIATION COMMUNITY CAN BE PROUD TO SUPPORT.

IN ADDITION, BY BUILDING ON ITS SPEED ADVANTAGE, AVIATION PROMOTES ACCESS TO VITAL MEDICAL CARE THROUGH THE USE OF AIR AMBULANCES IN REMOTE COMMUNITIES AND TRANSPORTING TIME-SENSITIVE MEDICAL SUPPLIES, SUCH AS VACCINES. AVIATION ALSO PLAYS A MAJOR ROLE IN DISASTER RELIEF.

### From the SDGs: relevant targets

**3.6)** By 2020, halve the number of global deaths and injuries from road traffic accidents [whilst this does not directly relate to aviation, safety of staff and passengers is an important part of the air transport system].

- **3.8)** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective quality and affordable essential medicines and vaccines for all.
- **3.9)** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- **3.a)** Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
- **3.b)** Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.

### From the SDGs: aviation-relevant indicators

**3.B.1)** Proportion of the population with access to affordable medicines and vaccines on a sustainable basis [specifically relating to the necessity of delivering on-time vaccines and medicines to populations, often by air].





- » The Norwegian government operates an air ambulance programme, which provides vital access to healthcare for those in remote areas of the country.
  \$\text{http://bit.ly/2eDMyhw}
- Airlines are often used to transport organs for transplants. In Brazil, an alliance of airlines and medical organisations coordinates this programme.
   http://bit.ly/2f15CPA
- » Cargo airlines are used to transport time-sensitive vaccines, which must be stored in specific conditions. In 2012, UPS transported 375,000 vaccines to Laos.
  \$\text{\text{http://bit.ly/2e5NoXT}}\$
- » Bombardier has held its annual 'Safety Standdown' event since 1996, a knowledge-based aviation safety training programme focusing on human factors, ethics, professionalism, automation, technology and safety culture.
  bttp://bit.ly/2h4ImNM
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Collaborate with all operational partners, but also throughout the supply chain to continue the robust safety culture that has been a priority of the aviation industry for decades.
- » Airports and airlines can promote passenger wellness activities.
- » Institute no-smoking facilities for offices, aircraft and airports in the few places where smoking remains a possibility.
- » Offer services and products that improve accessibility of medical services for rural and disadvantaged populations by supporting public service obligation routes with aircraft that are medical transport capable.
- » Take part in local or national blood donation programmes amongst employees, support disease prevention programmes and encourage the participation of employees.

- Support programmes to raise awareness by passengers and staff of cancer and other illnesses, through "pink ribbon" or other partnerships.
- » Provide a proactive employee wellness programme to prevent and reduce non-communicable diseases caused by working conditions.
- » Partner with local governments in support of safe walking and cycling infrastructure for office locations or even airport access.
- » Improve working conditions for employees across the value chain (including, for example, providing support for breastfeeding mothers) and provide employees and their families with healthcare services and insurance.
- » Improve safety and resilience of staff
   and other people in the value chain
  where feasible in locations with high
  disaster risk by developing robust
  disaster risk mitigation and preparedness
  plans (including emergency first aid and
  rescue skills) and providing them with
  physical and psychosocial support after
  disaster events.
- » Continue implementing cleaner ground service equipment (electric, natural gas) that reduces noise and particulate matter emissions around airports.

### How governments can assist

Ensure air services are part of remote community connectivity needs. By having regular passenger flights supported by public service obligation subsidies, the infrastructure for medical transport exists and is maintained. This is also a priority in times of crisis and should also be seen as a vital avenue for medical service access to remote communities.

States should also ensure compliance with ICAO's global standards and policies, as well as the industry standards to continue enhancing civil aviation safety by implementing state safety programmes and safety management systems of service providers.

# **SDG4**: QUALITY EDUCATION

Ensure inclusive and quality education for all and promote lifelong learning

AVIATION ENABLES THE MOVEMENT OF STUDENTS WORLDWIDE, PROVIDING ACCESS TO EDUCATIONAL OPPORTUNITIES WHICH CAN BE PARTICULARLY RELEVANT FOR STUDENTS FROM COUNTRIES IN SPECIAL SITUATIONS. THE INDUSTRY ITSELF ALSO CHAMPIONS QUALITY EDUCATION FOR ITS OWN EMPLOYEES, SPECIFICALLY IN AREAS SUCH AS ENGINEERING, AIR TRAFFIC MANAGEMENT AND PILOT TRAINING. THE MANUFACTURING SECTOR IN PARTICULAR IS WORKING HARD TO PROMOTE EDUCATION IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS.

### From the SDGs: relevant targets

**4.3)** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

**4.4)** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

**4.5)** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.





- » Brazilian aircraft maker Embraer saw the need for improved childhood education in its home town of São José dos Campos. It established Juarez Wanderley High School which provides full-time, free, high-quality instruction to 600 less-privileged students per year coming from the local public schools.
   ☼ http://bit.ly/2x8fFFu
- Pratt & Whitney Canada works in partnership with 20 Canadian universities and funds over 200 research projects.
   http://bit.ly/2f7FYAs
- Hong Kong Airport is currently setting up an Aviation Academy, which will welcome its first batch of students in 2017.
   http://bit.ly/2fo7o4d
- $\mathcal{Q}_{\text{www.aviationbenefits.org/SDGs}}^{\text{MORE EXAMPLES CAN BE FOUND AT}}$

### Individual company action ideas

- » Promote and invest in science, technology, engineering and mathematics education to secure access to employees with skillsets which meet future business needs in countries of operation (for example, engineers, technology experts and data analysts).
- Establish internships or apprenticeships to promote on-the-job skills and training.

- » Collaborate with other companies and educational institutions to provide local vocational training in order to develop a diverse talent pipeline including women, men and vulnerable persons (such as persons with disabilities, indigenous persons, and racial and ethnic minorities).
- » Collaborate with other businesses, NGOs and governments to improve learning in countries within the company's value chain, thereby making a long term investment in a diverse talent pipeline and improved economies. Whilst aviation requires technical skills in many roles, hospitality, management and logistics are also major areas of importance.
- » Establish training programmes to promote employee engagement and retention through expanding and refining their skillsets.

### How governments can assist

Liberalise visa requirement for students wishing to study abroad. Help promote the use of science, technology, engineering and maths in the education system. Partner with industry to provide vocational training and technical education necessary to sustain the forecast growth in aviation.

## **SDG5**: GENDER EQUALITY

Achieve gender equality and empower all women and girls

AVIATION IS WORKING TO ACHIEVE GENDER BALANCE ACROSS THE SECTOR, HOWEVER, THE INDUSTRY IS AWARE THAT WORK IS STILL NEEDED TO ENCOURAGE BALANCE IN TECHNICAL AREAS SUCH AS ENGINEERING AND FLIGHT CREW. MORE WORK NEEDS TO BE DONE TO ENCOURAGE INTEREST FROM YOUNG WOMEN TO JOIN TECHNICAL AREAS AND MEN TO JOIN FRONTLINE STAFF.

#### From the SDGs: relevant targets

**5.1)** End all forms of discrimination against all women and girls everywhere.

**5.2)** Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.

**5.5)** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

#### From the SDGs: aviation-relevant indicators

**5.5.2)** Proportion of women in managerial positions.





- » Alaska Airlines promotion of diversity, including the Forum for Engaging Men, Advancing Women programme, which brought together leaders from a range of industry segments to share candid dialogue about what men can do to support and advance women in the workplace. ♣ http://bit.ly/2fKtCC1
- » The International Aviation Women's Association exists to promote air transport as a career choice for women, and support their advancement in the industry. <a href="https://www.iawa.org">https://www.iawa.org</a>
- Air India and Vistara Airlines in India
  have both started offering woman
  passengers special services to ensure they
  are free from harassment. The services,
  which include a woman-only row of
  seats or no middle seating for female
  passengers have proved popular amongst
  customers and are not charged for.
   http://bit.ly/2vXzkai

MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Ensure pay parity and appropriate employment conditions (including maternity leave which protects jobs) for women, particularly in technical roles.
- » Actively encourage women to join the aviation sector and put in place mentoring opportunities to encourage women into leadership positions within the business.
- Ensure safe services for female passengers and employees.
- » Engage in policy initiatives and partnership efforts that help to prevent and identify human trafficking and sexual exploitation, which disproportionally affect women.

### How governments can assist

Encourage young women to consider aviation as a career, particularly in technical roles, by promoting science, technology, engineering and maths education from an early age. Government border protection agencies can work more closely with industry partners to reduce human trafficking.

# **SDG6:** CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

THIS IS NOT AN AREA USUALLY IDENTIFIED AS A MAJOR IMPACT FOR AIR TRANSPORT, ALTHOUGH LIKE ANY INDUSTRY AVIATION MUST BE MINDFUL OF WATER USE, PARTICULARLY IN WATER CONSTRAINED AREAS. HOWEVER, WATER AVAILABILITY MAY CONSTITUTE A SIGNIFICANT RESTRICTION ON GROWTH IF IT IS NOT MANAGED IN A PROACTIVE WAY. A LARGE NUMBER OF AIRPORTS HAVE ROBUST WATER MANAGEMENT PLANS.

### From the SDGs: relevant targets

**6.3)** By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

**6.4)** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

#### From the SDGs: aviation-relevant indicators

**6.3.1)** Proportion of wastewater safely treated.

**6.4.1)** Change in water-use efficiency over time.

**6.5.1)** Degree of integrated water resources management implementation (0-100).





- » Hong Kong Airport uses a 'triple water system' to improve the efficiency of its three major water sources: freshwater, seawater and treated wastewater, which has helped the airport reduce its freshwater demand by 50%.
  \$\text{http://bit.ly/2feERDo}
- » Airports Council International North America has developed best practice guidelines for airports to reduce water consumption. Around half of US airports already have water conservation programmes in place <sup>10</sup>.
  \$\text{http://bit.ly/2x5jEB3}
- » Emirates Airlines uses a 'drywash' technique on its fleet which saves 11.7 million litres of water each year, whilst improving the aerodynamic performance of its aircraft (reducing fuel burn).
  \( \text{\t
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

» Undertake an audit of your business locations to understand if any are in waterconstrained areas and put in place best practice guidance for water use there <sup>11</sup>.

- » Airports, manufacturing plants and maintenance facilities should be taking care that water run-off is not contaminated through a process for cleaning water before it enters the external stormwater system, or local rivers and seas.
- » Airlines and maintenance facilities could institute no-water cleaning of aircraft (such as using a dry wash gel).
- » All industry partners can install lowwater use toilet and washroom facilities in offices, operational centres and airports to cut down on water use.
- » Airport fire rescue services can limit water use to the minimum required for adequate training and also limit celebratory "water arches" in waterconstrained environments.
- » When unavoidable, purchase locallysourced, sustainably-produced bottled water for on-board service, so as to avoid undue pressure on water sources abroad.
- » Ground facilities can make use of rainwater capture and anaerobic digestion treatment systems for water treatment.

# **SDG7**: AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all

THE AVIATION INDUSTRY IS WORKING HARD TO DEVELOP SUSTAINABLE AVIATION FUELS, AS WELL AS DEPLOYING RENEWABLE ENERGY AT AIRPORTS. IN RECENT YEARS, THE AVIATION INDUSTRY HAS MADE SUBSTANTIAL PROGRESS TOWARDS DEVELOPING SUSTAINABLE ALTERNATIVE FUELS. THESE FUELS CAN BE UP TO 80% LESS CARBON-INTENSIVE THAN TRADITIONAL FOSSIL-BASED JET FUEL. THE PROGRESS IS ENCOURAGING, BUT THE INDUSTRY IS AWARE THAT MORE WORK NEEDS TO BE DONE IF ALTERNATIVE FUEL IS TO MAKE UP A SIGNIFICANT SHARE OF THE FUEL SUPPLY.

### From the SDGs: relevant targets

**7.2)** By 2030, increase substantially the share of renewable energy in the global energy mix.

7.3] By 2030, double the global rate of improvement in energy efficiency.

**7.a)** By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.

**7.b)** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states, and land-locked developing countries, in accordance with their respective programmes of support.

### From the SDGs: aviation-relevant indicators

**7.2.1)** Renewable energy share in the total final energy consumption [sustainable aviation fuel as a proportion of total jet fuel use].

**7.B.1)** Investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services.





- » Over 100 airports worldwide now utilise solar energy to power their operations.
   ♣ http://bit.ly/1l31Rm9
- » Stockholm's Arlanda Airport has instituted a policy of encouraging the uptake of low-emissions vehicles by giving priority to eco-taxis 
  ♣ http://bit.ly/2f1sBE8. And airports like Helsinki are using renewable diesel (or electric) to power their ground vehicles. ♣ http://bit.ly/2v5oEVa
- Airlines worldwide have joined together to form the Sustainable Aviation Fuel Users Group (SAFUG), which aims to promote the use of sustainable aviation fuels ∜ www.safug.org. Meanwhile, the US government and aviation industry CAAFI partnership promotes the widespread adoption of this new energy source for the sector. ∜ http://bit.ly/2fIF33
- » Finnair's new COOL Nordic Cargo Hub in Helsinki Cargo uses solar power to regulate the temperature of pharmaceutical and salmon supplies. http://bit.ly/2w3vV8k
- Ø MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Airlines and airports can work together to establish sustainable aviation fuel hubs and encourage the spread of the technology.
- » Ensure any new buildings (and renovations to existing structures) meet or exceed the highest energy efficiency standards, such as the LEED building code, etc.

- » Airports and other aviation sites can invest in solar photovoltaic farms to feed their electricity supply.
- » Airports can work with on-airport partners to implement lower-carbon ground service equipment, such as electric airside vehicles.
- » Companies can also play a leading role in deploying electric vehicle fleets and encouraging staff and passenger use of low-emissions vehicles.
- » All partners can work to improve the energy efficiency of their buildings.

### How governments can assist

To produce sustainable aviation fuel at commercial levels, governments need to work with and support the industry in their development, including by supporting the ASTM International process for testing and certifying new fuel pathways.

Governments need to institute the right policy environment to incentivise the production of these fuels. While the environmental case for the use of alternative fuels is clear, the economic case is also convincing. Once ramped up to commercial levels, alternative fuel supply would be more stable than traditional crude oil-based fuel and less susceptible to geopolitical events.

It is essential that this investment is made now through positive economic measures, rather than waiting to rely on increasing costs of using fuels, which would have a negative impact on competition. The important milestone will be when the cost of sustainable aviation fuel reaches parity with the cost of using the current fossil fuel-based 'Jet A-I' for airlines.

# **SDG8**: DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

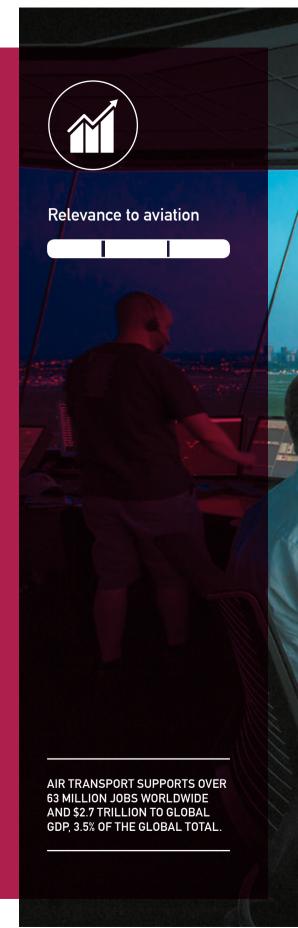
AS WELL AS PROVIDING SKILLED AND OFTEN HIGH-VALUE EMPLOYMENT OPPORTUNITIES, AVIATION SUPPORTS SOME KEY AREAS OF ECONOMIC DEVELOPMENT THROUGH THE CONNECTIVITY IT PROVIDES. THIS INCLUDES TRANSPORTING AROUND A THIRD OF WORLD TRADE BY VALUE AND 54% OF GLOBAL TOURISTS.

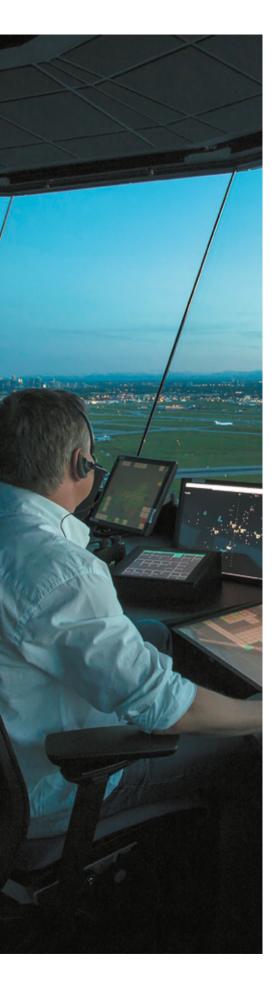
### From the SDGs: relevant targets

- **8.2)** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.
- **8.4)** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.
- **8.5)** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
- **8.6)** By 2020, substantially reduce the proportion of youth not in employment, education or training.
- **8.7)** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.
- **8.8)** Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.
- **8.9)** By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

### From the SDGs: aviation-relevant indicators

- **8.5.1)** Average hourly earnings of female and male employees, by occupation, age and persons with disabilities.
- **8.8.1)** Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status.
- 8.9.1) Tourism direct GDP as a proportion of total GDP and in growth rate.
- **8.9.2)** Number of jobs in tourism industries as a proportion of total jobs and growth rate of jobs, by sex.





- » French aerospace manufacturer, Safran, has been running operations in Mexico for over 20 years, providing jobs and supporting economic growth in the country. \$\times\$ http://bit.ly/2fBHKhv
- » Engine manufacturer, Rolls-Royce, is investing in a new facility in Bangalore, India, which will employ 500 people by the end of 2017. ♦ http://bit.ly/2eGNnWD
- Honeywell Aerospace launched a \$100 million investment fund in May 2017 aimed at supporting technology startups, mainly in the aerospace field.
   http://reut.rs/2webtS6
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Run airport area jobs fairs to encourage contact between on-airport businesses and the local community.
- » Develop partnerships between national aviation and tourism enterprises and with government agencies to help build interest in aviation-related jobs through science, technology, engineering and mathematics, as well as hospitality education.

- Session Establish internships or apprenticeships focusing on youth from disadvantaged communities to promote social mobility.
- » Ensure your supply chain is also undertaking diversity and inclusiveness programmes.
- » Develop the skills of lower paid workers to give them improved professional opportunities, both within and outside of the aviation sector.
- » Support the future employability of employees through continuous learning and development.
- » Promote and support the International Forum on Business Ethical Conduct (IFBEC)<sup>12</sup> actions.

### How governments can assist

Ensure that aviation and tourism are part of economic development planning - aviation can be a key driver of sustainable development. Ensure that joined-up thinking is used across planning for infrastructure, tourism, trade and transport. Aviation can be a catalyst for other sectors and should be incorporated into national and regional development plans.

# SDG9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

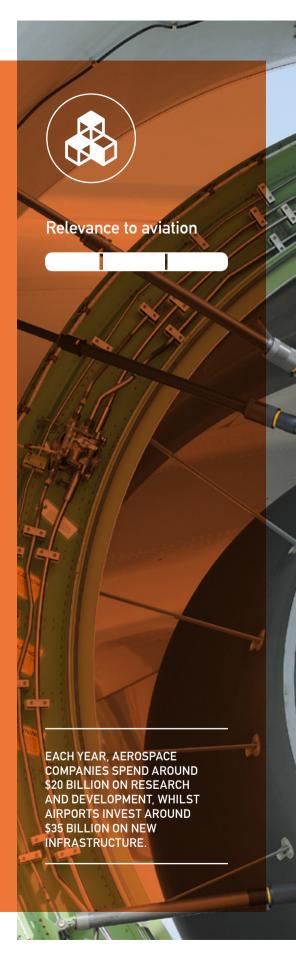
AVIATION IS ONE OF THE MOST INNOVATIVE INDUSTRIES IN THE WORLD. THE MANUFACTURING SECTOR IS CONTINUALLY DEVELOPING NEW TECHNOLOGY AND CREATES SIGNIFICANT URBAN INFRASTRUCTURE THROUGH THE BUILDING OF AIRPORTS, AS WELL AS AIR TRAFFIC MANAGEMENT. AVIATION HAS ALWAYS BEEN A DRIVER OF INNOVATION. EACH NEW GENERATION OF AIRCRAFT IS 15-20% MORE FUEL EFFICIENT THAN THE GENERATION IT REPLACES, BUT MORE COMPREHENSIVE PARTNERSHIPS BETWEEN COMMERCIAL MANUFACTURERS AND GOVERNMENTS ON RESEARCH AND DEVELOPMENT (R&D) ARE NEEDED IF THIS PROGRESS IS TO BE BUILT ON.

#### From the SDGs: relevant targets

- **9.1)** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- 9.2) Promote inclusive and sustainable industrialisation and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.
- **9.41** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with al countries taking action in accordance with their respective capabilities.
- **9.5)** Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.

### From the SDGs: aviation-relevant indicators

- 9.1.2) Passenger and freight volumes, by mode of transport.
- 9.3.1) Proportion of small-scale industries in total industry value added
- 9.4.1) CO<sub>2</sub> emission per unit of value added.
- 9.5.1) Research and development expenditure as a proportion of GDP
- 9.5.2) Researchers (in full-time equivalent) per million inhabitants.
- 9.B.1) Proportion of medium and high-tech industry value added in total value added.





- » Boeing and Commercial Aircraft Corporation of China (COMAC) have announced an agreement to expand their joint technology research centre in China. ➡ http://bit.ly/2foasNO
- Aerospace manufacturers have been at the forefront of additive layer manufacturing (otherwise known as 3D printing).
   http://bit.ly/2fm7fjH
   http://bit.ly/2foBwN4
- According to the Toronto Region Board of Trade, the value of airport infrastructure in Canada was collectively \$59 billion in GDP in 2015.
   http://bit.ly/2vp29gB
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Ensure supply chains are spread globally to help improve skills, especially in emerging and developing economies.
- » Develop supply chain standards that follow the spirit of the SDGs.
- » Ensure that small and medium-sized enterprises, as well as suppliers in disadvantaged communities or social enterprise schemes, are also considered in procurement.

- » Encourage innovation amongst employees with systematic programmes of suggestions and encouragement of ideas from all parts of the company (in sustainability, community relations, efficiency and so forth).
- Facilitate the hiring of apprentices and PhD students.

### How governments can assist

Develop quality aviation infrastructure (including air navigation systems and airports) commensurate with the level of predicted traffic growth and based on ICAO's global plans.

Make aviation development a key part of economic development plans, particularly as least developed countries work with international partners and multilateral development banks on economic and social growth.

Put in place measures to improve air traffic management procedures to simplify flight paths and allow aircraft to fly more efficient routes and thus reduce fuel use.

Establish or continue financial support of industry-government partnerships in research and development.

# SDG10: REDUCED INEQUALITIES

Reduce inequality within and among countries

THE CONNECTIVITY PROVIDED BY AIR TRANSPORT REDUCES INEQUALITY BETWEEN COUNTRIES, AS WELL AS INDIVIDUALS, BY CREATING TRADE LINKS AND PROVIDING ACCESS TO GOODS AND SERVICES FOR THOSE IN REMOTE COMMUNITIES. THE DEMOCRATISATION OF AIR TRAVEL HAS ALSO MEANT THAT AIR SERVICES ARE AVAILABLE TO MORE PEOPLE THAN EVER BEFORE. AVIATION-SUPPORTED TOURISM CAN ALSO HAVE A VITAL ROLE TO PLAY AND IS NOTABLE FOR THE OPPORTUNITIES IT CAN OFFER FOR ECONOMIC ACTIVITY AT A LOCAL LEVEL, INCLUDING HIGH PROPORTIONS OF WOMEN AND YOUTH PARTICIPATION 13.

### From the SDGs: relevant targets

**10.1)** By 2030, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average.

**10.2)** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

**10.b)** Encourage official development assistance and financial flows, including foreign direct investment, to states where the need is greatest, in particular least developed countries, African countries, small island developing states and landlocked developing countries, in accordance with their national plans and programmes

### From the SDGs: aviation-relevant indicators

**10.7.2)** Number of countries that have implemented well-managed migration policies.





- » ATNS, the South African air navigation service provider, runs a bursary programme for trainee air traffic controllers, addressing inequalities in education. ♦ http://bit.ly/2fiCWKa
- Airways New Zealand runs the First Foundation scholarship, which funds young people with limited financial resources to attend university for four years. It is open to students intending to study a career in engineering from disadvantaged areas.
   http://bit.ly/2euGnyB
- » Brisbane Airport has published a guide for people with dementia using their facilities. This guide, developed with researchers, helps make the journey through the airport less intimidating ¹⁴ ♥ http://bit.ly/2xfRD9g and Cork Airport has developed a guide for people with autism to help them and their families prepare for the airport experience¹⁵.
   ♥ http://bit.ly/2g5Pgli
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Ensure company facilities (and airport infrastructure) are modified or developed to encourage accessibility for staff and passengers, including people who are young, elderly, disabled or other passengers with reduced mobility.
- » Consider accessibility in important communications: airlines can ensure safety briefings are suitable for passengers with hearing or vision

- difficulties; airports should work with local groups to encourage easy-to-use wayfinding; websites should also be designed with accessibility in mind.
- » Pay staff a living wage and encourage other companies within sphere of influence to also pay living wages.
- » Create opportunities for lower paid workers to develop their skills and gain access to improved employment opportunities, both within and outside of the aviation industry.
- » Institute global best practice for equality of workforce (partners benefits, leave conditions) for all groups of employees including gender, physical ability, sexual orientation, etc.
- » Establish employee resource groups to foster interaction and engagement on social, economic and political inclusion issues.

### How governments can assist

Collaborate with industry, international development partners and other stakeholders to develop transport solutions – including intermodal connectivity and transport corridors – for states where the need is greatest, in particular least developed countries, small island developing states and landlocked developing countries.

Inefficiencies in visa requirements could also be addressed through partnerships between governments and industry, making air travel more easily accessible to a wider section of the public and generating more economic growth.

# SDG11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe resilient and sustainable

AVIATION-RELATED INFRASTRUCTURE IS A MAJOR PART OF URBAN AND RURAL COMMUNITIES WORLDWIDE AND CONTRIBUTES TO THE CONNECTIVITY OF POPULATIONS THROUGH INTEGRATED TRANSPORT LINKS. MORE WORK IS NEEDED ON MULTIMODAL TRANSPORT DEVELOPMENT.

### From the SDGs: relevant targets

**11.2)** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

11.5) By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

**11.6)** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

### From the SDGs: aviation-relevant indicators

**11.2.1)** Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities.

11.5.2) Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services

11.6.1) Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities.

**11.6.2)** Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted).





- The Port of Seattle collaborates with airlines, service providers, and the local community to reduce emissions and improve air quality.
   http://bit.ly/2foLQoi
- Manchester Airport has developed an overarching Sustainable Development Plan, with a significant section concentrating on access to the airport. By encouraging more use of public transport from the city to the airport to support a transport network that is efficient, convenient, reliable and safe.
   http://bit.ly/2vNUSGF
- » Artisans d'Angkor is a social enterprise run by the operator of Cambodian airports, VINCI airports, aimed at keeping alive Khmer culture and supporting local craftsmen.
  http://bit.ly/2iqA3MH
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

» Collaborate with governments and other stakeholders to improve rail, bus and other public transport access to airports and to work sites (and then ensure staff and passengers are incentivised to use the services).

- including for low-income families, women, children, older persons, and persons with disabilities.
- Work with governments and local authorities to ensure new airport infrastructure development is carried out in a sustainable manner, connecting to cities with environmentally-sound public transport.
- Ensure that services are not only limited to high-density urban and city destinations, but also reaching rural populations and those in remote areas.

### How governments can assist

Reinforce efforts toward minimising the environmental effects from civil aviation activities, including measures to address aircraft noise and engine emissions embracing ICAO balanced approach methodology of land-use planning, technological and operational improvements.

Promote public transport access to airports and aviation work sites.

Ensure good land use planning practices are used for all airport-related development, to protect both airport expansion opportunities and local community impacts.

# SDG12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

DUE TO INTERNATIONAL LAWS, NOT ALL WASTE GENERATED ON FLIGHTS CAN BE RECYCLED — MUCH OF IT MUST BE DESTROYED FOR QUARANTINE REASONS — BUT THE INDUSTRY IS WORKING ON WAYS TO CHANGE THIS. AIRLINES AND MANUFACTURERS WORK CLOSELY TOGETHER TO RESPONSIBLY DISPOSE OF AIRCRAFT AT THEIR END-OF-LIFE. WHEN COMPARED TO OTHER INDUSTRIES, AIRCRAFT MANUFACTURERS OPERATE RELATIVELY CLEAN OPERATIONS WITH LIMITED CONSUMPTION OF WATER AND CO2 EMISSIONS.

#### From the SDGs: relevant targets

**12.2)** By 2030, achieve the sustainable management and efficient use of natural resources.

12.3) By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

**12.4)** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment

**12.5)** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

**12.6)** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

12.b) Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

### From the SDGs: aviation-relevant indicators

**12.4.1)** Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement.

**12.4.2)** Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment.

12.5.1) National recycling rate, tons of material recycled

12.6.1) Number of companies publishing sustainability reports

12.7.1) Number of countries implementing sustainable public procurement policies and action plans.

12.B.1) Number of sustainable tourism strategies or policies





- Galapagos Airport's terminal is made from 80% recycled material from the old terminal and the structure that supports the new building was constructed from recycled petroleum exploration pipes, which were recovered from the Ecuadorian Amazon.
   http://bit.ly/2x2XgdS
- Nearly every major aircraft and engine manufacturer is part of the Aircraft Fleet Recycling Association. These industry leaders have shown their commitment to end-of-life issues by joining and/or getting accredited by AFRA.
   http://afraassociation.org
- Auckland Airport has worked with
   Air New Zealand and the New Zealand
   Government to implement an innovative
   cabin waste recycling programme that
   diverted over half the waste from landfill
   and also complies with the country's
   strict quarantine laws.
   http://bit.ly/2xctr80
- Air France-KLM is working to minimise waste throughout the supply chain with an eco-design approach.
   http://bit.ly/2wnHBW5
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Improve operation and management of aircraft and ground equipment to maximise energy efficiency.
- » Collaborate with governments to increase accessibility and affordability of public transport networks to tourists.
- » Take steps to measure, reduce and report progress on sustainability actions, continuing to increase the level of transparency and quality of reporting across the sector. In particular, take note of the need for climate-related risk reporting.
- » Participate in car pooling and taxi ride sharing schemes to reduce the number of car and taxi journeys.

- » Reduce waste generation from manufacturing and operations and institute separation and recycling for all remaining waste from aircraft and airports where practicable.
- » Encourage governments to support multi-modal operations for passengers and freight, to improve operational efficiency and reduce emissions.
- Ensure that hazardous waste from maintenance and manufacturing sites is properly dealt with.
- » Consider working with organisations such as Sedex or Ecovadis to ensure sustainable supply chain decisions and management 16.
- » Ensure your company is committed to responsible disposal of aircraft and other equipment through recycling and re-use.
- » Equipment that is in good working condition can be re-purposed and donated to partners in developing nations (but should also be accompanied by training in the use and maintenance of the items).

### How governments can assist

Work with the industry to support recycling of waste from international flights. Work to alter international waste legislation to allow the safe recycling of cabin waste from international flights.

Increase the rate of aircraft end-of-life recycling worldwide.

Implement policies that increase accessibility and affordability of public transport networks to tourists.

Support multi-modal operations for passengers and freight to improve operational efficiency and reduce emissions.

Promote additive layer manufacturing (also known as 3D printing).

### **SDG13: CLIMATE ACTION**

Take urgent action to combat climate change and its impacts

ALL SECTORS OF THE AVIATION INDUSTRY HAVE AGREED ON A ROBUST STRATEGY FOR REDUCING CO2 EMISSIONS AND ARE MAKING EXCELLENT PROGRESS WORKING TOWARDS THREE GLOBAL CLIMATE GOALS. IN OCTOBER 2016, THE UN INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) SUCCESSFULLY AGREED ON THE CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION (CORSIA), WHICH WILL ENABLE THE INDUSTRY'S SHARED GOAL OF CARBON-NEUTRAL GROWTH.

IN THE LONG-TERM, AVIATION AIMS TO HALVE ITS NET CO $_2$  EMISSIONS BY 2050, USING 2005 AS THE BASELINE. THIS WILL BE ACHIEVED THROUGH THE DEVELOPMENT OF NEW TECHNOLOGY, COMMERCIALISATION OF SUSTAINABLE AVIATION FUELS AND MORE EFFICIENT NAVIGATIONAL INFRASTRUCTURE.

### From the SDGs: relevant targets

**13.2)** Integrate climate change measures into national policies, strategies and planning.

### From the SDGs: aviation-relevant indicators

13.2.1) Number of countries that have communicated the establishment or operationalisation of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other).

**13.3.2)** Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions.



Relevance to aviation



THE AVERAGE FLIGHT TODAY WILL PRODUCE AROUND HALF THE CO2 THAT THE SAME FLIGHT WOULD HAVE IN 1990, THANKS TO COLLABORATIVE EFFORT THROUGH NEW TECHNOLOGY AND BETTER OPERATIONS.



- The entire aviation industry has agreed on a climate action plan for the short, medium and long-term.
   http://bit.lv/1R1ILil
- Each new generation of aircraft is on average 15-20% more fuel efficient than the generation it replaces.
   http://bit.ly/2uaN7ej
- Airports Council International (ACI)
   runs the Airport Carbon Accreditation
   programme, which certifies airports on
   carbon reduction efforts.
   http://bit.ly/2fj7ptR
- Oslo Airport, operated by Avinor, became the first airport to offer sustainable aviation fuel to all airlines.
   http://bit.ly/2f1qLU7
- » In 2016, ICAO agreed a CO₂ Standard for new aircraft. ♦ http://bit.ly/2x4Lopq
- » NATS, the UK air traffic management provider, assesses its efficiency performance by grading each flight it manages with a 'three dimension inefficiency score', which leads to better performance and a reduction in emissions. \( \brace \) http://bit.ly/2uqLvIN
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

» Ensure that the global aviation industry strategy for CO<sub>2</sub> reduction is integrated into business planning and take note of the ATAG Aviation Climate Solutions best practices for industry CO<sub>2</sub> reduction.

- » Airports should take part in the ACI Airport Carbon Accreditation programme.
- » Where possible, institute alternative transport options for staff and passengers such as car pools or bike schemes, public transport to airport and work.
- » Airports and other aviation partners should determine climate risk profiles for their operations and put in place adaptation plans in conjunction with authorities.
- » Integrate climate risks on aviation infrastructure and operations into investment analysis and decision making.
- » Invest in zero-emissions ground service equipment, where feasible.

### How governments can assist

Volunteer to join the ICAO CORSIA from the initial stages. This will ensure greater coverage for the scheme and more financing to climate projects (in particular in developing countries).

Promote integrated partnerships between industry and government in the commercialisation of sustainable aviation fuel, research and development of aircraft technology, more efficient air traffic management infrastructure and integrated transport links to airports.

Ensure consultation between industry partners and government regulators in developing inputs to the ICAO State Action Plans.

# SDG14: LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

WHILST LIFE UNDER THE OCEAN IS NOT AN AREA OF PRIMARY INFLUENCE FOR AIR TRANSPORT, THERE ARE SOME LOCATIONS WHERE AIRPORTS ARE BUILT INTO THE SEA, WITH INEVITABLE IMPACTS ON SEA LIFE. MOREOVER, AVIATION CONNECTS TOURISTS TO DESTINATIONS THAT RELY HEAVILY ON HEALTHY MARINE ECOSYSTEMS TO DRIVE ECONOMIC GROWTH.

### From the SDGs: relevant targets

**14.1)** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

**14.7)** By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.

### From the SDGs: aviation-relevant indicators

**14.2.1)** Proportion of national exclusive economic zones managed using ecosystem-based approaches.





- » Kansai International Airport in Japan was built on an artificial island in the harbour to reduce noise for local communities. As part of the airport's development, special concrete walls were installed which encouraged the growth of seaweed to provide a suitable environment for sea life.
  \$\times\$ http://bit.ly/2w7hkJ7
- » Auckland International Airport in New Zealand is built on the shores of Manukau Harbour and the airport has a comprehensive system to clean the stormwater from its entire property before it enters the waterways. This includes a comprehensive spill response system, constant cleaning of roads and apron areas, as well as an annual shore cleanup programme. ♣ http://bit.ly/2wJ6Pho
- In partnership with the Ocean Foundation, JetBlue quantified the value that shoreline health brings to its customers.
   http://bit.ly/2f80FAX
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

» Airports that are on or near the sea should ensure that they mitigate any

- negative impacts associated with aviation activities: water run-off should be filtered to remove impurities; construction should minimise disruption to sea life; and operators should look to partner with local conservation groups to help improve surrounding seafront areas.
- » Reduce plastic waste and ensure all plastic waste is disposed of appropriately so as to not end up in the ocean.
- » Help global efforts to combat illegal ocean wildlife trafficking, work with conservation associations on the shipment of unsustainablysourced sea life such as shark fin.
- » Educate passengers travelling to exotic destinations on appropriate diving behaviour around delicate environments such as reefs and on souvenirs that can be harmful.

### How governments can assist

Promote policies that maintain and improve marine ecosystem health for sustainable, nature-focused tourism.

### **SDG15: LIFE ON LAND**

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

NOT NORMALLY SEEN AS AN AREA OF MAJOR AVIATION IMPACT, BUT SOME AVIATION PROJECTS CAN HAVE AN IMPACT ON LAND USE — PARTICULARLY BUILDING OF INFRASTRUCTURE AND POTENTIALLY THE USE OF SUSTAINABLE AVIATION FUELS. IN ADDITION, A NUMBER OF AVIATION PARTNERS ARE INVOLVED IN PROJECTS THAT HELP SUPPORT THIS SDG.

### From the SDGs: relevant targets

**15.2)** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

**15.7)** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.

**15.8)** By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.

**15.c)** Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

### From the SDGs: aviation-relevant indicators

**15.2.1)** Progress towards sustainable forest management [in relation to use of REDD+ credits for the CORSIA]

15.7.1) Proportion of traded wildlife that was poached or illicitly trafficked





- » Singapore Airlines works in partnership with the Harapan Rainforest Initiative, which aims to restore and protect one of the world's most threatened and biodiverse ecosystems. \$\times\$ http://bit.ly/2fj6Wpl
- Chicago's O'Hare is one of a number of airports that keep apiaries on their grounds, increasing pollination in the surrounding areas and used as a 'biomonitor' for air quality.
   http://bit.ly/2fdWFix
- » The aviation sector is working with partners in government and conservation organisations to combat the illegal wildlife trade. Through the United for Wildlife Transport Taskforce, the International Air Transport Association and Airports Council International are working to raise awareness of the illegal wildlife trade among employees and passengers. 
  ♦ http://bit.ly/1qhVUiE
- $\mathcal{Q}^{\text{MORE EXAMPLES CAN BE FOUND AT}}_{\text{www.aviationbenefits.org/SDGs}}$

### Individual company action ideas

» Biodiversity, location-appropriate landscaping and soil management and impact on local geography are all important considerations for the development of aviation infrastructure, especially airports.

- » Through the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (and voluntary carbon mechanisms such as ACI's Airport Carbon Accreditation) commit to offset CO<sub>2</sub> emissions by using projects that have agricultural and forestry co-benefits.
- » Show commitment to tackling the illegal wildlife trade by signing the United for Wildlife Buckingham Palace Declaration.
- » Raise awareness of the issue of wildlife trafficking with staff, passengers, customers and clients.
- » Ensure that the development of sustainable aviation fuels is carried out in a manner which does not negatively impact land use.
- » Ramp up support for the fight against the illegal trade in wildlife, especially through education of industry frontline staff.
- » Participate in global and industry initiatives such as the Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES) Partnership.

### How governments can assist

Ensure long-term land-use planning and district zoning is a key component of any national or local development plans.

# SDG16: PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

AT ITS MOST FUNDAMENTAL LEVEL, AIR TRANSPORT BRINGS PEOPLE TOGETHER. THIS FOSTERS UNDERSTANDING AND HELPS BRIDGE DIVIDES AND ULTIMATELY HELPS BUILD PEACE. IT IS PERHAPS BEST ELABORATED IN THE PREAMBLE TO THE CHICAGO CONVENTION, THE 'FOUNDING DOCUMENT' OF INTERNATIONAL CIVIL AVIATION:

"Whereas the future development of international civil aviation can greatly help to create and preserve friendship and understanding among the nations and peoples of the world, yet its abuse can become a threat to the general security; and whereas it is desirable to avoid friction and to promote that co-operation between nations and peoples upon which the peace of the world depends;

Therefore, the undersigned governments having agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically:

Have accordingly concluded this convention to that end."

AVIATION ALSO HAS A VERY VISIBLE RESPONSIBILITY FOR THE SECURITY OF ITS OPERATION AND THE INDUSTRY WORKS CLOSELY IN PARTNERSHIP WITH GOVERNMENTS AND MULTILATERAL BODIES TO ENSURE THAT SYSTEM IS ROBUST. IN ADDITION, MANY AVIATION PARTNERS ARE WORKING TO REDUCE THE USE OF AIR TRANSPORT AS A CONDUIT FOR ILLEGAL ACTIVITIES SUCH AS WILDLIFE AND HUMAN TRAFFICKING.

### From the SDGs: relevant targets

16.3) Promote the rule of law at the national and international levels and ensure equal access to justice for all.

- **16.5)** Substantially reduce corruption and bribery in all their forms.
- **16.6)** Develop effective, accountable and transparent institutions at all levels.

**16.A)** Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.

### From the SDGs: aviation-relevant indicators

**16.2.2)** Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation [related to efforts by the aviation industry to work on education for employees to help end human trafficking].





- » Over 40 aviation-related companies are members of the UN Global Compact and nearly 50 airlines and airports produce CSR reports that are aligned to the Global Reporting Initiative.
- FedEx established a separate Corporate Identity and Compliance department in 2015 to reinforce its commitment to ethical business practices and elimination of corruption and bribery.
   http://bit.ly/1OA7oJC
- » The ICAO Secretariat provides legal advice and assistance to ICAO member states when legal disputes over aviation activity arise. <sup>t</sup>√s www.icao.int
- » American Airlines' 120,000 staff members are being trained to identify cases of potential child sex trafficking.
  \$\text{\text{b}}\$ http://bit.ly/2vK8Vhw
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Ensure compliance with all relevant international and domestic laws and regulations.
- » Promote accountability and transparency in business practices to avoid corruption.

- » Engage with a range of local stakeholders, including civil society, to better understand the local context in high-risk areas to inform approaches to not only 'do no harm' but also to improve safety and security.
- » In collaboration with other stakeholders, especially governments, and through ICAO, mitigate the risk of terrorism and other acts of violence or cyber-attacks against aircraft or aviation infrastructure.
- » Ensure that frontline staff are educated to be aware of the signs of illegal activities (such as trafficking in wildlife or humans) and work with authorities to reduce this.
- » Collaborate across the industry to address industry specific anticorruption challenges that undermine individual companies' anti-corruption efforts and compliance measures.

### How governments can assist

Work with the industry on a range of issues, particularly safety and security, to ensure the peaceful contribution of air transport to global connectivity, trade and tourism. Engage with the transport sector to help reduce the incidence of aviation being used unwittingly as a conduit for illegal activities through capacity building for frontline staff.

# **SDG17:** PARTNERSHIP FOR THE GOALS

Strengthen the means of implementation and revitalise the global partnership for sustainable development

PARTNERSHIPS BETWEEN ALL SECTORS OF THE AVIATION INDUSTRY ENABLE THE GLOBAL AIR TRANSPORT INDUSTRY TO OPERATE: AIRPORTS, AIRLINES, AIR TRAFFIC MANAGEMENT, MANUFACTURERS AND SUPPLIERS. THE INDUSTRY PARTNERS WITH THE UNITED NATIONS (MAINLY THROUGH THE INTERNATIONAL CIVIL AVIATION ORGANIZATION) AND GOVERNMENTS TO DEVELOP REGULATIONS AND COOPERATE CLOSELY ON ISSUES SUCH AS CLIMATE ACTION, SAFETY AND SECURITY.

### From the SDGs: relevant targets

17.9) Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation.

**17.11]** Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.

17.14) Enhance policy coherence for sustainable development.

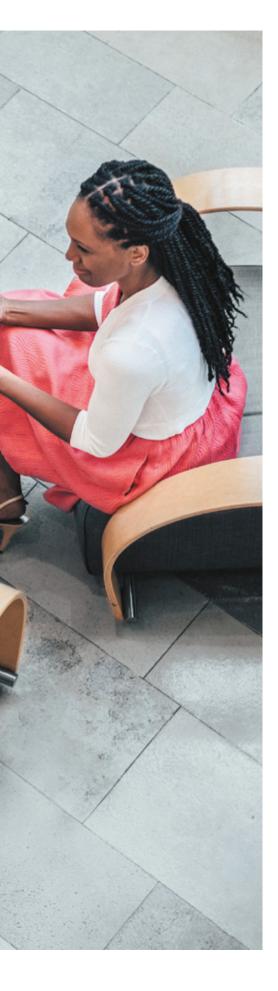
**17.16)** Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.

**17.17)** Encourage and promote effective public, public private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

### From the SDGs: aviation-relevant indicators

**17.3.2)** Volume of remittances (in United States dollars) as a proportion of total GDP.





- » The whole aviation industry has worked with governments to secure the Carbon Offsetting and Reduction Scheme for Aviation, through the UN agency, ICAO ♥ http://bit.ly/VHXXT4 and with ICAO to advance aviation safety in Africa.
- DHL is working with the UN
   Development Programme to prepare airports for natural disasters under the 'Get Airports Ready for Disaster' (GARD) programme.

   http://bit.ly/2xcwMnw
- Airports of Thailand have shown their commitment to supporting the SDGs in their 2016 Sustainable Development report, highlighting ways in which they are partnering with a range of public and private stakeholders to achieve SDG 17 and others.
   http://bit.ly/2hKo2kI
- MORE EXAMPLES CAN BE FOUND AT www.aviationbenefits.org/SDGs

### Individual company action ideas

- » Increase industry and intergovernmental collaboration to improve capacity-building for sustainable aviation development.
- » Develop sustainability working groups between employees, between partner

- organisations, with local communities and with governments to advance sustainability objectives.
- » Align your organisation's business strategy to the Sustainable Development Goals.
- » Establish a robust impact measurement framework for corporate, multistakeholder partnership and industry level contributions to sustainable development including regular monitoring and transparent evaluation and reporting.
- » Collaborate with other transportation companies and stakeholders to provide industry perspectives to governments, policymakers, legislators and regulators on the sustainable development impact of legislative, regulatory and tax frameworks including recommendations for improvement.

### How governments can assist

Promote diversified funding and financing sources for aviation development in partnership with states, international and regional organisations, the industry, as well as multi-lateral development banks and other financial institutions, particularly in states in special situations (LDCs, LLDCs and SIDS).

### The SDGs as a business framework

How individual aviation sector businesses can integrate the SDGs into their long-term planning.

Whilst aviation, the wider mobility sector and all parts of the economy have a vital role to play in helping to deliver the SDGs and build more secure and inclusive societies, there are a range of things that individual businesses can do to take advantage of the framework that the SDGs provides.

The 17 goals can help guide internal thinking on corporate strategy, aligning it with local and national government strategy. Not all aviation partners need to concentrate on the full list of 17 SDGs. Companies should choose the most appropriate SDGs to align with their strategic priorities, whilst also exploring if there are any areas where they are lacking progress.

An excellent resource, the SDG Compass, was developed by the United Nations Global Compact, the Global Reporting Initiative and the World Business Council on Sustainable Development.

The SDG Compass helps guide companies on how they can align their strategies as well as measure and manage their contribution to the SDGs. Companies can apply the five steps to set or align their course, depending on where they are on the journey of ensuring that sustainability is an outcome of core business strategy.

- » Understanding the SDGs: As a first step, companies are assisted in familiarising themselves with the SDGs.
- » Defining priorities: To seize the most important business opportunities presented by the SDGs and reduce risks, companies are encouraged to define their priorities based on an assessment of their positive and negative, current and potential impact on the SDGs across their value chains.
- » Setting goals: Goal setting is critical to business success and helps foster shared priorities and better performance across the organisation. By aligning company goals with the SDGs, the leadership can demonstrate its commitment to sustainable development.
- » Integrating: Integrating sustainability into the core business and governance and embedding sustainable development targets across all functions within the company, is

key to achieving set goals. To pursue shared objectives or address systemic challenges, companies increasingly engage in partnerships across the value chain, within their sector or with governments and civil society organisations.

» Reporting and communicating: The SDGs enable companies to report information on sustainable development performance using common indicators and a shared set of priorities. The SDG Compass encourages companies to build the SDGs into their communication and reporting with stakeholders.

Not all companies will need to fulfil each and every step, but the SDG Compass provides a simple model for building the principles of the global sustainable development strategy into a corporate strategy. Many of the items outlined in this report will help with an aviation-specific view, although regional and local situations will also need to guide the process.

www.sdgcompass.org

### References

Aviation: Benefits Beyond Borders report from the Air Transport Action Group: www.aviationbenefits.org

Ashgabat Statement following the first United Nations Global Sustainable Transport Conference: http://bit.ly/2xm8ub0

Sustainable Development Goals: https://sustainabledevelopment.un.org/sdgs

United Nations Secretary General's High Level Advisory Group on Sustainable Transport report Mobilizing Sustainable Transport for Development: <a href="http://bit.ly/2dViivX">http://bit.ly/2dViivX</a>

United Nations Global Compact SDG Compass for businesses: www.sdgcompass.org

United Nations Global Compact SDG Matrix for Transportation: http://bit.ly/2hlySdC

### **Footnotes**

- <sup>1</sup>UN Department for Economic and Social Affairs Population Division World Population Prospects 2017 Revision: http://bit.ly/2rEDAXA
- <sup>2</sup> UN Department for Economic and Social Affairs Population Division *The World's Cities in 2016*: http://bit.ly/2qgl0am
- <sup>3</sup> UN WTO publication Supporting Tourism for Development in Least Developed Countries: http://bit.lv/2wyCMDK
- 4 ICAO's analysis reflects the organisation's own strategic planning and the role it has in supporting multiple aspects of the SDGs: http://bicly/2veNWll
- <sup>5</sup> UN WTO Tourism for Development discussion paper: http://bit.ly/2y3Voy
- <sup>6</sup> Currently, nine airlines are supporting the Change for Good programme: Aer Lingus, American Airlines, All Nippon Airways, Asiana Airlines, Cathay Pacific, easyJet, Hainan Airlines, Japan Airlines and Qantas. In addition, a number of airlines have signed corporate partnerships with UNICEF including Norwegian, Emirates Airline and Mango Airlines. Industry technology supplier Amadeus raised over SI million in 2016 alone through its micro-donation engine, www.clickforchange.com, which has partnered with Iberia, Finnair and Norwegian. UNICEF 2016 Annual Report: http://uni.cf/2fnl5mr
- <sup>7</sup> Airlink is a rapid-response humanitarian relief organisation that links 37 airlines worldwide with non-profits organisations to alleviate poverty conditions in disaster-hit areas of the world: www.airlinkflight.org
- 8 See the United States' Good Samaritan Food Donation Act of 1996: http://bit.ly/2x8tFIC
- 9 UNESCO statistic
- <sup>10</sup> ACI North America water efficiency goal promotes some of the following steps:
- » Install low-flow plumbing fixtures in terminals and administrative buildings such as: automatic shutoff fixtures; waterless urinals; and low-flow toilets and faucets;
- » Utilise native or drought-tolerant plant species for landscaping;
- $\ \ \, \text{Wise gray water for landscaping; capture and collect rain water for non-potable uses;} \\$
- » Partner with tenants to develop water conservation strategies for airport businesses, for example, rental car facility car washing with reclaimed or "gray" water.
- » Training and education of airport staff.
- » Promote water conservation to airport passengers.
- » Coordination with local water utility.
- » Optimise cooling tower makeup water consumption, convert open loop evaporative humidifiers with closed loop versions, replace open loop water cooled condensers by air cooled, or closed-loop water cooled condensers

See the full report at: http://bit.ly/2fnVhGT. Also see the Australian Government study of water conservation practices at Australian airports: http://bit.ly/2y3XRIU

- <sup>11</sup> Resources such as the Global Compact's CEO Water Mandate Guide (http://bit.ly/2y3TEVT), Corporate Citizenship Water Means Business (http://bit.ly/2x1q72a), and WBCSD's Business Guide to Circular Water Management (http://bit.ly/2th3wbL) could assist in developing such a water use map.
- 12 IFBEC: www.ifbec.info
- <sup>13</sup> UN WTO Tourism for Development discussion paper: http://bit.ly/2y3Voyj
- ${}^{\text{H}}\text{ Brisbane Airport }\textit{Guide for people living with dementia and their travel companions: } \text{http://bit.ly/2sbSWmJ}$
- <sup>15</sup> Cork Airport Visual guide for travelling through the airport: http://bit.ly/2foESSD
- $^{16}\,Sedex\ and\ Ecovadis\ are\ global\ platforms\ for\ sharing\ responsible\ sourcing\ data\ on\ supply\ chains\ and\ procurement:\ www.sedexglobal.com\ and\ www.ecovadis.com$

