



WORLD'S SAFEST RUNWAY LIGHTING

# S4GA CARBON IMPACT

ON AIRPORTS INDUSTRY



# CARBON FREE BY 2050

Global airports industry is experiencing total revision of its goals, priorities, and growth strategy related to climate changes we are facing today. With reaching high standards in safety and reliability of airport technologies over the last few decades, the priority was given to saving our planet by going green in all possible ways.



**55** airports mapped their carbon footprints

**40** airports actively reduced their CO<sub>2</sub> emissions

**15** airports reduced their CO<sub>2</sub> emissions & engaged others to do so

**51** carbon neutral airports

A big step forward in this trend was the launch of Airport Carbon Accreditation in June 2009 and signing NetZero2050 Agreement between over 200 European airports.

The highest level of carbon management under Airport Carbon Accreditation is carbon neutrality. In order to reach it, airport has to reduce CO<sub>2</sub> emissions as much as possible, and compensate for the remaining residual emissions with investment in high-quality carbon offsets.

Europe remains the most active region of Airport Carbon Accreditation. Currently, there are 161 accredited airports in Europe, 51 of them are carbon neutral.

ICAO, the main global aviation regulatory body, supports airports in their carbon-free management by providing a series of practical and ready-to-use information documents to support the planning and implementation of airport infrastructure projects that envisage significant environmental benefits.

ICAO identifies several renewable energy options available for airports: solar, wind, biomass, hydro and geothermal.





# SOLAR ENERGY IMPACT

Solar energy is one of the renewables constantly growing in demand by aviation industry.

Following a year of stable demand, the solar PV market increased 12% in 2019 to a record 115 GW (direct current), for a total of 627 GW.



**GIGAWATTS OF ENERGY  
ARE CONSUMED ANNUALLY  
BY INT'L AIRPORT**

**400**

**200**

**TONS OF CO2 EMISSIONS  
CAN BE REDUCED  
WITH SOLAR POWER**

Solar power allows airports to cover the major part of their annual electrical energy needs and reduce CO2 emissions accordingly. Installation of photovoltaic solar farms, and switch to solar-powered electrical equipment - such as runway lighting – brings international airports in Europe as well as in the rest of the World few steps closer to its carbon neutrality.



S4GA Solar Runway Lighting



# SOLAR AIRFIELD LIGHTING



Airfield lighting is one of the airport's most common energy uses at airside. About € 100 000 are spent annually by an average European international airport on powering its airfield lighting system.

Luckily, we have today a solar solution that can cover airfield lighting energy needs and reduce CO2 emissions for up to 100%.

## 500

**AIRPORTS  
ARE USING SOLAR  
AIRFIELD LIGHTING**

## € 5 MLN

**TOTAL SAVINGS  
ON ELECTRICITY**

## 100%

**REDUCTION  
OF CO2 EMISSIONS  
ON AIRFIELD LIGHTING**

Runway lighting powered by solar energy is becoming a standard permanent solution for regional and domestic airports. More than 500 airports are using solar runway lighting as a primary illumination on their airfields.

In the meantime, international airports are entering this tendency by adding solar AGL as backup solution or going to hybrid power supply system.

Solar runway lighting not only reduces CO2 emissions completely, but increases safety of airport flight operations.



# ABOUT S4GA



**WORLD'S SAFEST  
RUNWAY LIGHTING**



**GOVERNMENT-  
OWNED**



**CERTIFIED**

S4GA is the world's leading manufacturer and supplier of certified permanent solar-powered airfield lighting systems. The Company is an ISO 9001:2015 certified manufacturer owned by Polish Government.



As at 2020, S4GA has delivered over 150 airfield lighting systems to civil and military customers in more than 50 different countries.

S4GA solar systems are cost-effective carbon-free airfield lighting solutions applicable for all types of airports. S4GA products are compliant with ICAO requirements and meet the highest environmental standards available in aviation industry.

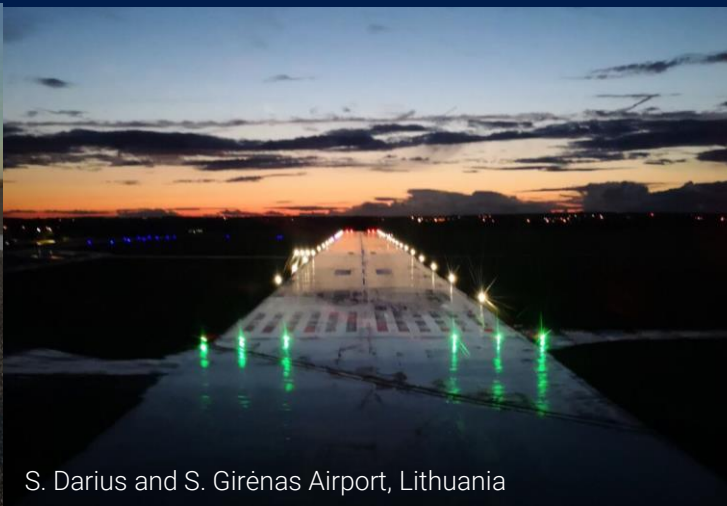




# S4GA SOLAR INSTALLATIONS WORLDWIDE



Thessaloniki Airport Makedonia, Greece



S. Darius and S. Girėnas Airport, Lithuania



Military Air Base, North Africa



Wilwal International Airport, Ethiopia



Dhaalu Airport, Maldives



Solutions4GA Sp. z o.o.  
01-476 Kaliskiego, Warsaw, Poland  
+48 22 270 10 29  
[www.solutions4ga.com](http://www.solutions4ga.com)  
[office@solutions4ga.com](mailto:office@solutions4ga.com)  
VAT EU: PL 524 276 80 55