

1 INTRODUCTION

According to a report by the Intergovernmental Panel on Climate Change (2001), aviation contributes to 2% of global manmade GHG emissions. It is estimated that airport activities account for up to 5% of total aviation emissions.

Along with other aviation industry stakeholders, European airports are seeking to address the challenge of climate change and have developed a wide range of activities to reduce carbon emissions linked to airport operations. These emissions are mainly stemming from energy use in airport buildings and infrastructure, transport to/from airports, airside vehicles, aircraft ground movements and energy consumption and refrigerants.

The on-going efforts, pursued by the Montenegrin aviation sector to comply with the next-to-come EU directive on the inclusion of aviation activities in the EU Emission Trading Scheme, could be further strengthened by acting also on Montenegrin airports.

This project would be perfectly in line with the objectives of the Montenegro's National Strategy for Sustainable Development (NSSD). Specifically, it would nicely complement the current sustainable measures in the transport sector.

2 PROJECT OBJECTIVES

The overall goal of the project is to account, monitor and manage the GHG emissions of the Montenegrin airports in order to apply Montenegrin NSSD's principles also to the aviation sector. Specifically, the project will cover the GHG emissions of Montenegrin airports of Podgorica and Tivat.

3 SCOPE OF WORK

In order to successfully develop the project, the following activities are envisaged:

Activity 1: Estimation of the Carbon Footprint

Calculate airports' annual emissions based on internationally recognized standards and protocols as follows:

- Determine its 'operational boundary' and the emissions sources within that boundary which are Scope 1, Scope 2 and Scope 3 sources, as defined by the Greenhouse Gas Protocol;
- Collect data and calculate the annual carbon emissions for the previous year for those sources;
- Compile a carbon footprint report.

Activity 2: Identification of GHG Reduction Measures

On the basis of the outcome achieved in the previous phase, key sectors will be identified for emission reduction. GHG emission reduction measures might include but are not limited to:

- Energy demand reduction – through audit, measurement, management, automated meter reading (AMR), automated monitoring & targeting (AM&T), well set and effective control.
- Clean energy supply – combined heat & power, renewable energy sources (on-site or off-site).
- Low energy design – standards for refurbishment and new build, compulsory inclusion of carbon reduction studies in all new projects.
- Options for alternative fuel airport vehicles (electric, hybrid, hydrogen, LPG, etc).

Activity 3: Technical Assistance for GHG Neutralization

This activity consists in providing technical assistance for offsetting remaining emissions to achieve carbon neutral operations for all emissions over which the airport has control. This can be achieved in two main ways:

- investing in a GHG emission reduction project elsewhere in order to obtain property rights on the generated and registered emission reduction;
- purchase carbon credits on the secondary market.