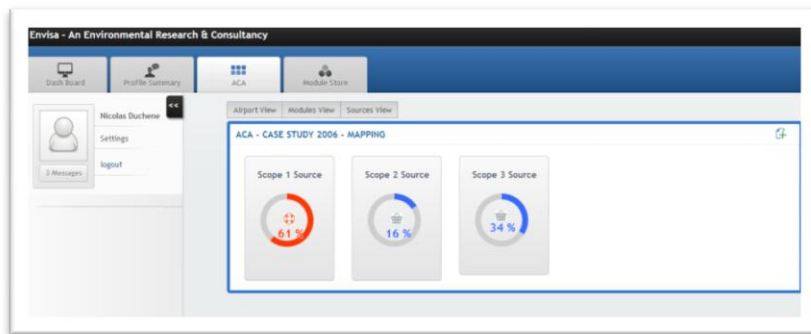


AeroGenie: innovative footprint for the aeronautics.

Carbon footprint, energy usage optimization and much more

AeroGenie® is a web application developed by ENVISA to help airports to reducing their environmental impact and to optimizing their energy consumption via the implementation and monitoring of adequate optimization strategies. Internationally recognized methods and databases have been coupled with data compiled by ENVISA during its thirteen years of existence in the field of environment and energy for the air transport. The features of AeroGenie® were designed for airport's environmental people to conduct carbon footprints of course, but not only: the platform also includes modules to estimate local emissions, waste produced, and water consumed allowing thereby complete environmental impact studies. Each source of pollution can be assigned to a category depending on the level of action which the airport has (similar to the “control, guide, influence” system developed by ACI). Also, the ownership of every source can be defined.



Why AeroGenie® differs from existing tools?

- Built in capability to create “renewable energy sources” scenarios for existing airport studies in order to evaluate the reduction associated to the replacement of fossil fuel technologies with “green” alternatives.
- Traffic data upload and strengthening once for many downstream applications (carbon, local emissions, in the future noise module, etc.)
- Produce application form for Airport Carbon Accreditation which can be directly uploaded on the ACI ACA online website for verification and approval.

Fully compatible with ACI ACA

AeroGenie® is fully aligned with the requirements, databases and methods of the Airport Carbon Accreditation scheme deployed by the Airport Council International – Europe and Asia Pacific on a voluntary basis.

Unique skillset

AeroGenie® requires no installation or specific software to run, it enjoys multi-user collaborative environment and fully secured and encrypted data warehouses on cloud-servers. Dedicated versions of AeroGenie® can also be fully customized and deployed on the intranet of a specific organization. The uncertainty analyses and communication means proposed by AeroGenie® are aligned with the best practices recommended by the Copernicus Institute (www.nusap.net). AeroGenie® will rationalize data analysis and ensure harmonized impact studies since the same dataset is used for multiple purposes.

Expected future capabilities

- Interface with aircraft noise models to produce noise maps.
- Combined output with open source geo-graphical information system (QGIS).
- Economic modules to estimate the return-on-investment and financial savings associated to the deployment of renewable energy sources on the platform.
- Full life cycle assessments for aeronautics

Despite this first version being dedicated to airports, the objective of AeroGenie® is to expand the methods and data to other actors of the aero-industry (airlines, manufacturers, etc.) and ultimately to other industries (oil & gas, chemistry, etc...).

