EcoSecurities

Consultancy – Biogenic Models

About Us

EcoSecurities is an impact environmental service provider with 25 years of experience in carbon markets and emission reduction projects around the world. At EcoSecurities, we are committed to developing high-quality carbon projects based on the principles of environmental integrity, transparency and good practices, which contribute not only to climate change mitigation, but also to sustainable and inclusive development.

EcoSecurities structures carbon projects from Nature-Based Solutions (NbS), such as forest conservation (REDD+), reforestation, agriculture, blue carbon and energy related projects. We provide tailor-made services for the origination, development and financing of these projects.

Consultancy Context

EcoSecurities is rapidly growing its projects portfolio, therefore we are structuring a database with capacitated professionals to support the company in a variety of activities related to the implementation of its portfolio.

We are asking for professionals, interested in collaborating with us; to send the information requested in the "Application Process" session below, so we can include it in our database and contact the professional in a speedier way, when the opportunities arise to request then, a tailored-made proposal for it.

The Consultant hired would support the company in the development of Land Management Projects, aiming to enhance soil health and productivity through the development and application of biogenic models. These models will help understanding microbial processes and how carbon is stored in soil, which is crucial to enhance natural carbon sinks and reduce GHG levels. These biogenic models, will serve to orient company strategies for sustainable land management, providing insights into how different land-use practices affect soil carbon storage and emissions, guiding practices that enhance carbon sequestration.

Consultancy activities

Consultancy activities would include, but are not limited to:

1) Understand and develop models of crop and pasture production, water and nutrient flow in the soil to simulate production systems in a dynamic and conditional way.
2) Design and develop biogenic models for soil carbon content assessments.
3) Integrate microbial processes into soil fertility models.
4) Instruct proper soil samples to comply with carbon standards sample requirements.
5) Use statistical tools to interpret data and validate models.

6) Calibration and validation of soil organic carbon models (i.e., ICBM, RothC, Yasso, etc.), ecosystem models (i.e., DayCent, CENTURY, CANDY, etc.), and/or crop growth simulation models (i.e., GRASIM, APSIM, SNAPGRAZE, etc.).
7) Develop comprehensive data analysis reports.

About you

- Bachelor's and/or Master's degree Soil Science, Biostatistics, Microbiology, Agronomy, Zootechnics or related disciplines.
- Proven experience in developing and implementing biogenic models.
- Desirable knowledge in:
  ✓ Principles and concepts of the main carbon project standards (Verra, CCB, Gold Standard, CDM, etc).
  ✓ Verra's methodology VM0042 - Improved Agricultural Land Management
  ✓ Experience with projects involving Low Carbon Agriculture in cattle ranching.

Skills and competences:
- Strong analytical and statistical skills, with knowledge of Bayesian statistics being desirable
- Ability to identify issues and suggest solutions
- Attention to detail: ensuring accuracy in data collection, analysis, and reporting.
- Knowledge of the Python programming language is desirable
- Ability to work independently and collaboratively with a team
- Proficiency in English is required.

Application Process

E-mail to ana.garrido@EcoSecurities.com by October 31st, containing:
- CV or portfolio
- Contact information of three references
- Usual consultancy fee per hour or per service/activity

Please include "Consultancy – Biogenic Models" in the e-mail subject.

EcoSecurities is an equal opportunity employer and complies with all employment and labour laws and regulations that prohibit discrimination in hiring and ensures that candidates from all backgrounds are fairly and consistently considered during the recruitment process.