

Aicha Slassi Sennou, PhD

Task 2 and 3 Support

SCS ENGINEERS

PROFESSIONAL EXPERIENCE

Dr. Aicha Slassi Sennou is an SCS Project Manager and sustainability expert with experience in environmental consulting, GHG accounting, decarbonization planning, LCAs, and climate risk analysis. She is skilled in managing corporate sustainability projects, including GHG inventories and climate disclosures. Dr. Aicha has the proven ability to lead technical work, deliver actionable insights, and support clients in achieving climate goals. She is experienced in translating complex environmental data into actionable insights for commercial and brand teams.

10	30+	3
Years of Experience	End-to-End GHG Inventory Projects	Flagship LCA Models

A representative sampling of Dr. Sennou's relevant project experience is provided below.

Details

Education

PhD – Philosophy in Energy & Environmental Systems, NC A&T State University, Greensboro, NC

MS – Sustainable Energy Management, Al Akhawayn University, Ifrane, Morocco

BS – Engineering and Management, Al Akhawayn University, Ifrane, Morocco

Professional Affiliations

Air and Waste Management Association (AWMA); Member

GHG Inventories

Since 2020, Dr. Sennou has led end-to-end GHG inventory development for over 30 corporate clients from various sectors, including services and manufacturing sectors, using the Anthesis tool RouteZero, ensuring compliance with GHG Protocol standards across Scopes 1, 2, and 3. She delivered third-party verified GHG inventories for Scopes 1, 2, and 3 by responding to auditors' technical questions about data collection and calculations, in alignment with WRI GHG Standards and ISO 14064-1, and also delivered sector-specific decarbonization strategies, including value chain engagement for a Fortune 50 manufacturer and net-zero road mapping for fintech clients. Dr. Sennou demonstrated deep technical expertise across all 15 Scope 3 categories, including the development of a Category 15 (Investments) methodology using the PCAF standard. She provided technical leadership on Environmental, Social, and Governance (ESG) disclosures, including CDP submissions and Science Based Targets initiative (SBTi) alignment, supporting clients in meeting investor and regulatory expectations.

Meta, Menlo Park, CA, Scope 3 Inventory Tool. As Project Manager, Dr. Sennou supported the development of a Scope 3 inventory tool designed to showcase common challenges companies face in data collection, emissions quantification, and target setting. The tool features real-world case examples that illustrate typical data gaps and barriers, along with practical strategies for overcoming them. Through this project, Dr. Sennou gained a comprehensive understanding of Scope 3 calculation challenges across various sectors and strengthened her expertise in corporate GHG accounting.

Various Financial Institutions, Nationwide, First-Time Calculation of Scope 3, Category 15 Financed Emissions (PCAF Methodology). As Project Manager, Dr. Sennou led cross-functional teams in developing voluntary GHG inventories for financial institutions, covering Scope 1, 2, and 3 emissions. She conducted methodology reviews, ensured data quality and consistency across Inventory Management Plans, and supported external disclosures to CDP and SBTi. Her work included calculating financed emissions under the PCAF methodology and analyzing year-over-year emission reductions for clients such as Sallie Mae and Blue Shield of California.

Clients in Biotechnology, Software, Telecommunications, HR Tech, Consumer Products, Retail, and Others, Nationwide. As Project Manager, Dr. Sennou led the end-to-end development of GHG inventories for over 30 corporate clients across diverse sectors, including biotechnology, software, telecommunications, HR tech, consumer products, retail, and horticulture. Utilizing the Anthesis RouteZero platform, she ensured compliance with GHG Protocol standards across Scopes 1, 2, and 3. Her responsibilities included conducting methodology reviews, supporting emissions calculations, validating input data, performing quality assurance, and refining Inventory Management Plans to ensure accuracy and consistency. Most of the inventories were prepared for third-party verification. Dr. Sennou also provided technical leadership on ESG disclosures—supporting CDP submissions and aligning inventories with SBTi requirements. She demonstrated expertise across all 15 Scope 3 categories and led the implementation of practical strategies to close data gaps and enhance inventory completeness.

Sustainability Strategy, Environmental Research, and ESG Analysis Across Corporate and Academic Settings

North Carolina A&T State University, Greensboro, NC. As a research associate, Dr. Sennou designed and led a large-scale, 4-year research project to study the impact of biofilter production conditions on wastewater treatment efficiency, contributing to advancements in sustainable water management. She executed laboratory experiments and conducted data analysis using advanced characterization instruments to identify optimal biofilter production conditions for enhanced wastewater treatment outcomes. Dr. Sennou secured $100,000 in competitive funding for research, writing, and travel, demonstrating strong grant-writing skills and a commitment to advancing innovative environmental solutions. She developed a Life Cycle Assessment (LCA) Model for biofilters using GaBi software, comparing GHG emissions and environmental impacts with traditional water filtration methods, leading to actionable insights for reducing carbon footprints in water treatment.

The Hershey Company, Hershey, PA, LCA Models for Flagship Products. As an EDF Climate Corps fellow, Dr. Sennou developed robust LCA models for three flagship products (Kisses Seasonal Bags, Kisses Regular Bags, and Reese's 2 Cups), using GaBi software and leveraging in-depth data on energy consumption, water use, waste generation, and emissions. She identified and prioritized critical environmental impacts by comparing their environmental footprints, focusing on areas with the highest potential for reduction to align with the company's sustainability objectives. Dr. Sennou generated actionable insights and recommendations based on LCA results, enabling the company to reduce environmental impacts, optimize resource use, and improve product sustainability. She contributed to corporate sustainability goals by integrating life cycle insights into product strategies, enhancing the company's overall environmental performance and reputation.