Funded by the Erasmus+ Programme of the European Union

**Project title**: Carbon footprint of companies

**Number of students** (minimum 2)**:** 2 – 4

**Project duration** (1-6 months): 4 – 6

**Project frame** (Bachelor/Master, small project): Bachelor/Master

**Background:**

Global warming - and how to stop it - is a challenge that concerns politics, industry and citizens alike. While politicians are debating on how to implement a legal framework to reduce CO₂e emissions, many companies have set their own goals to contribute to a low-carbon economy. What tools can help to calculate the CO2e emissions of a company? Are there standard solutions fitting for several companies across sectors?

**The challenge:**

Recently, atene KOM hired a climate protection officer in order to reduce the CO₂e emissions of the company. As a first step, the carbon footprint of atene KOM will be evaluated. Therefore, atene KOM will establish an internal database to gather information about Co2e emissions of items and elements used within the company.

In a second step, this database can be expanded to data concerning further processes and items usually found in offices and other work places and their respective carbon footprint. By making this data available as open source, it could be used by other companies who are planning to evaluate and optimize their own CO₂e emissions but do not have the capacity or budget to use the service of specialized consulting companies.

Additionally, the structure and content of this database could also take into account the needs of private consumers, who are looking for guidance in their daily life. Citizen scientists could help to establish such a huge database. To guarantee the integrity of the data, a peer reviewed and scientific sound guidance system needs to be developed.

Students working on this project will work on the following questions:

* How can data to determine the carbon footprint be collected, stored and evaluated?
* How can a database (and a possible front-end interface) be designed and how can it be made available for others to use and participate?
* How can the integrity of open source data be guaranteed in a peer-reviewed process?

**The company:**

The Agency for Communication, Organisation and Public Management (atene KOM GmbH) offers Europe-wide consulting services for various topics of defining regional competitive profiles and innovation development. The work of atene KOM is supported by and dedicated to inter-sectoral network of economists, scientists and engineers as well as decision makers from municipal and transregional public institutions all over Europe. With excellent networking and wide-ranging creative input, it is possible to always pick up new ideas, prepare and translate them into innovative projects. The atene KOM’s areas of expertise are regional development, broadband deployment and technologies, sustainable energy and education. The strengths of atene KOM lie in intercultural cooperation and the moderation of joint work of economy, politics and science.

Number of employees: >200

Head quarter: Berlin

Further locations: Osterholz-Scharmbeck, Wiesbaden, Leipzig, Stuttgart, Schwerin, München, Bonn, Brussels

**Supervisors:**

Philipp Schmal (p.schmal@atenekom.eu) is working as representative for climate protection for atene KOM. He obtained his bachelor’s degree in sustainable forest management and his master’s degree in urban eco-system sciences. He worked as a consultant for environmental protection and climate protection within several projects that focused on sustainable building greening systems.

Johanna Varanasi (j.varanasi@atenekom.eu) works as a project manager in regional development for atene KOM. She obtained her master’s degree in European History and Anthropology and managed several cross- border and European projects in public administrations and universities. She joined atene KOM in 2019 and is now focusing on transnational project development.

**Candidate background:**

The candidates ideally have one of the following subjects: business informatics, computer science or business. The candidates can divide the challenge fitting to business and IT backgrounds.

Candidates with a business background should ideally have experience or an interest in corporate sustainability strategies.

Candidates with a computer science background: knowledge of database design (and how to customize them) as well as experience with front-end development will be an asset to the project.

**References and complementary description:**

[**www.atenekom.eu**](https://atenekom.eu/?lang=en)