

Baseline assessment of the environmental performance

ECF4CLIM Methodology

The ECF4CLIM methodology is based on an innovative hybrid conceptual and methodological participatory approach combining and integrating elements from participatory action research, citizen engagement, deliberative formation, crowdsourcing, and theory-based stakeholder evaluation. This hybrid methodology approach will guarantee that, for each group within the educational community, the most suitable participatory strategies and tools are implemented.

Pilot schools

A set of 13 pilot schools located in Portugal, Spain, Romania, and Finland was selected to test and validate the ECF4CLIM methodology

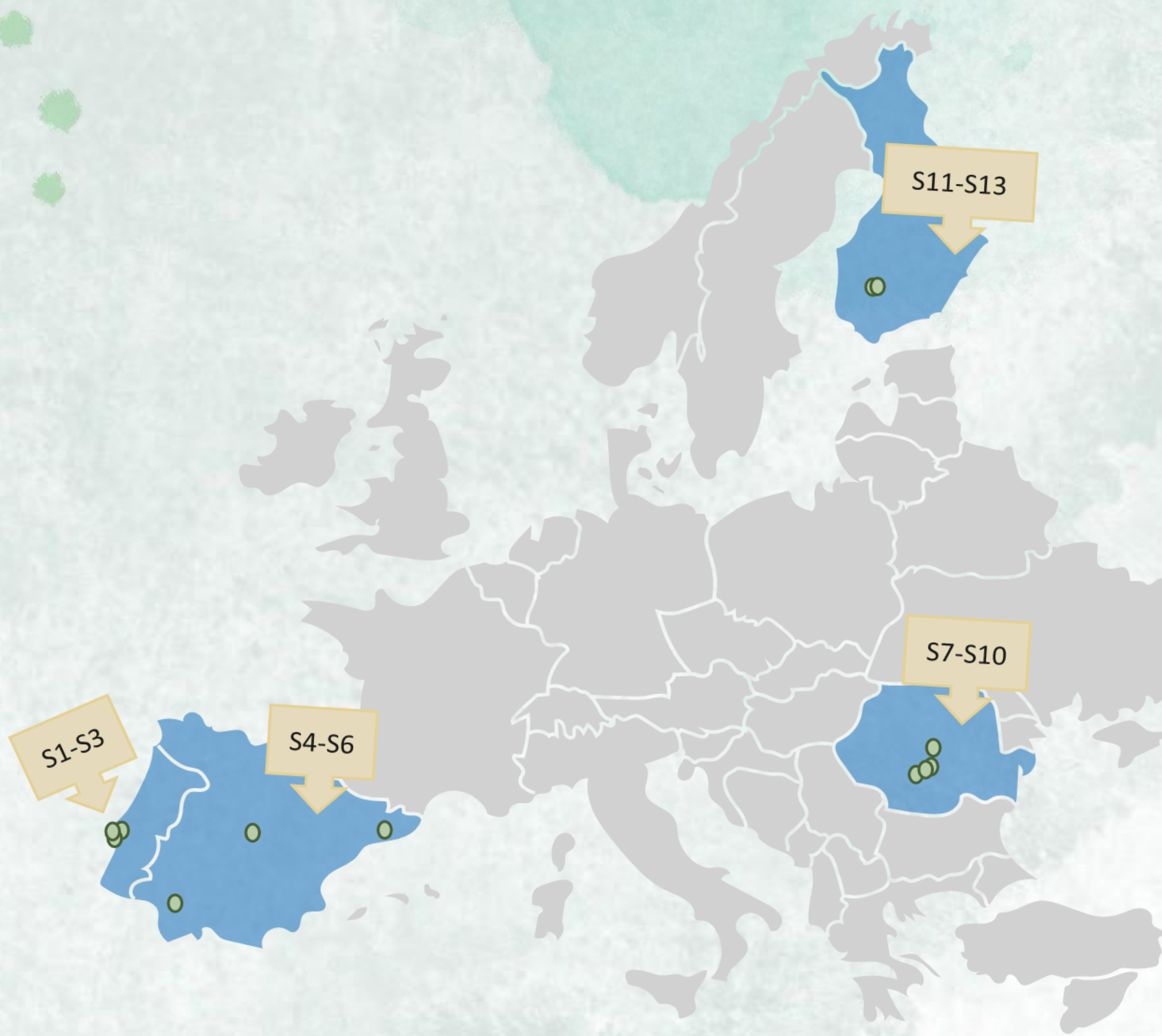


Figure 1 - Location of the ECF4CLIM pilot schools.

Multi-criteria environment assessment through sustainable indicators

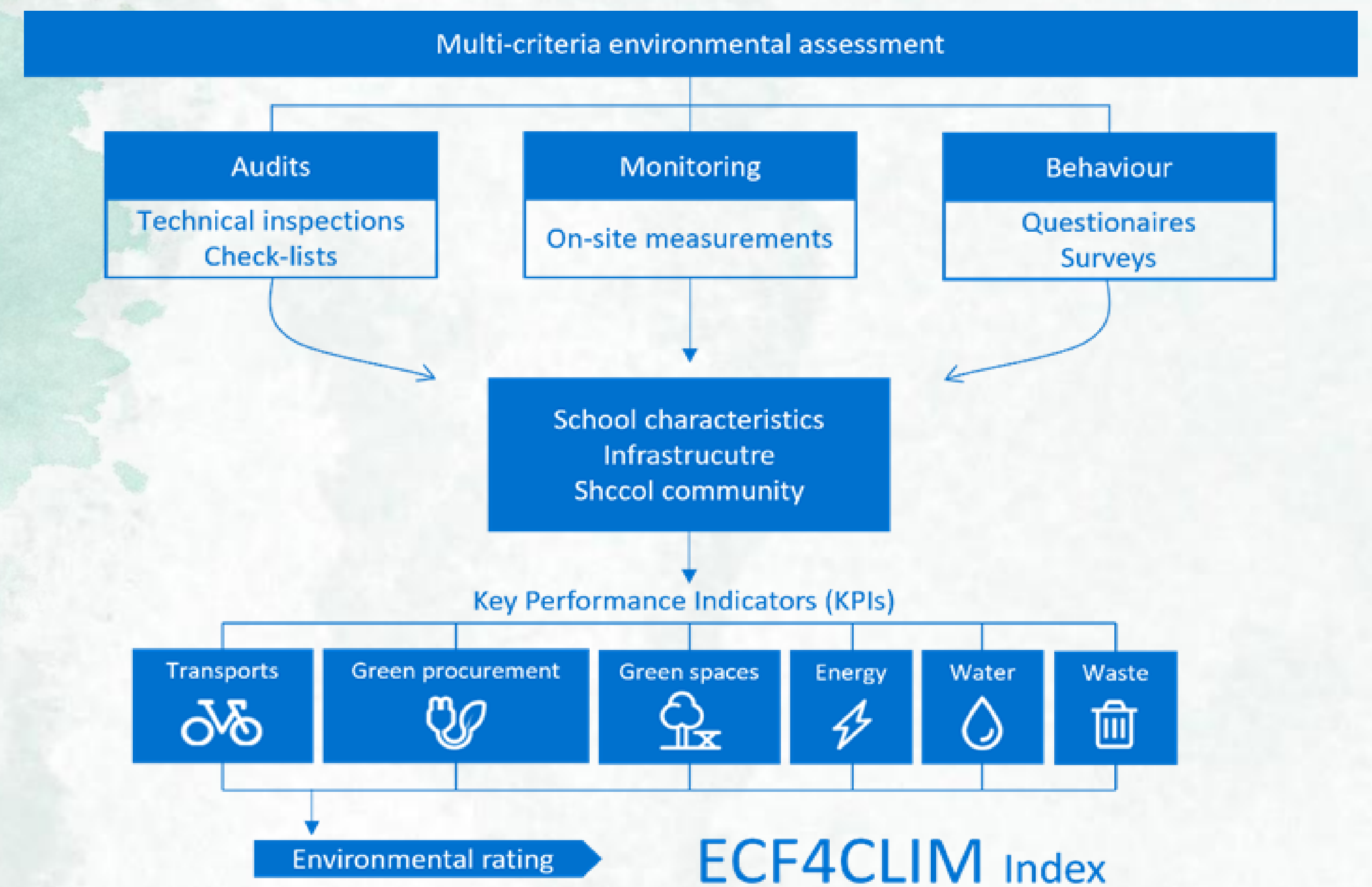


Figure 2 - Multi-criteria environment assessment focused on six environmental sectors.

The multi-criteria environment assessment focuses on six environmental sectors: transport, green procurement, green spaces, energy, water, and waste, assessed by Key Performance Indicators (KPIs), obtained through technical assessment applied at the selected educational establishments, as illustrated in Figure 2.

The technical assessment was based on technical audits, that used a checklist, to collect information about building characteristics, equipment, activities, behaviours, occupation profiles and resource consumption of the educational buildings.

Annual carbon emissions

Carbon emissions associated with energy consumption can be seen as an important KPI to assess the environmental impact of energy consumption in schools. However, we should consider that the same electricity consumption in schools from different countries can cause different emissions of CO₂ due to the different national energy mixes. The carbon emission from schools can be reduced by implementing energy efficiency measures and increasing renewable energy use.

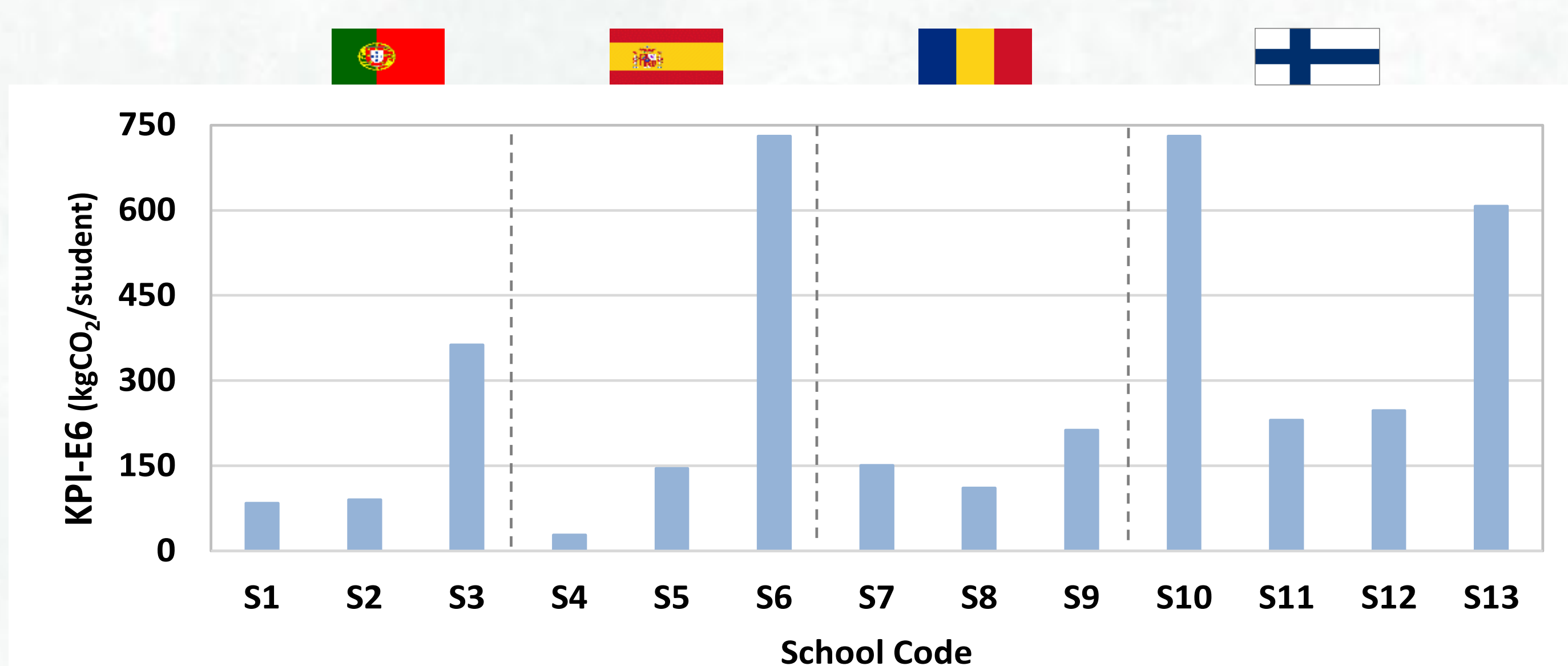


Figure 3 - KPI results for the carbon emissions by the energy consumption.

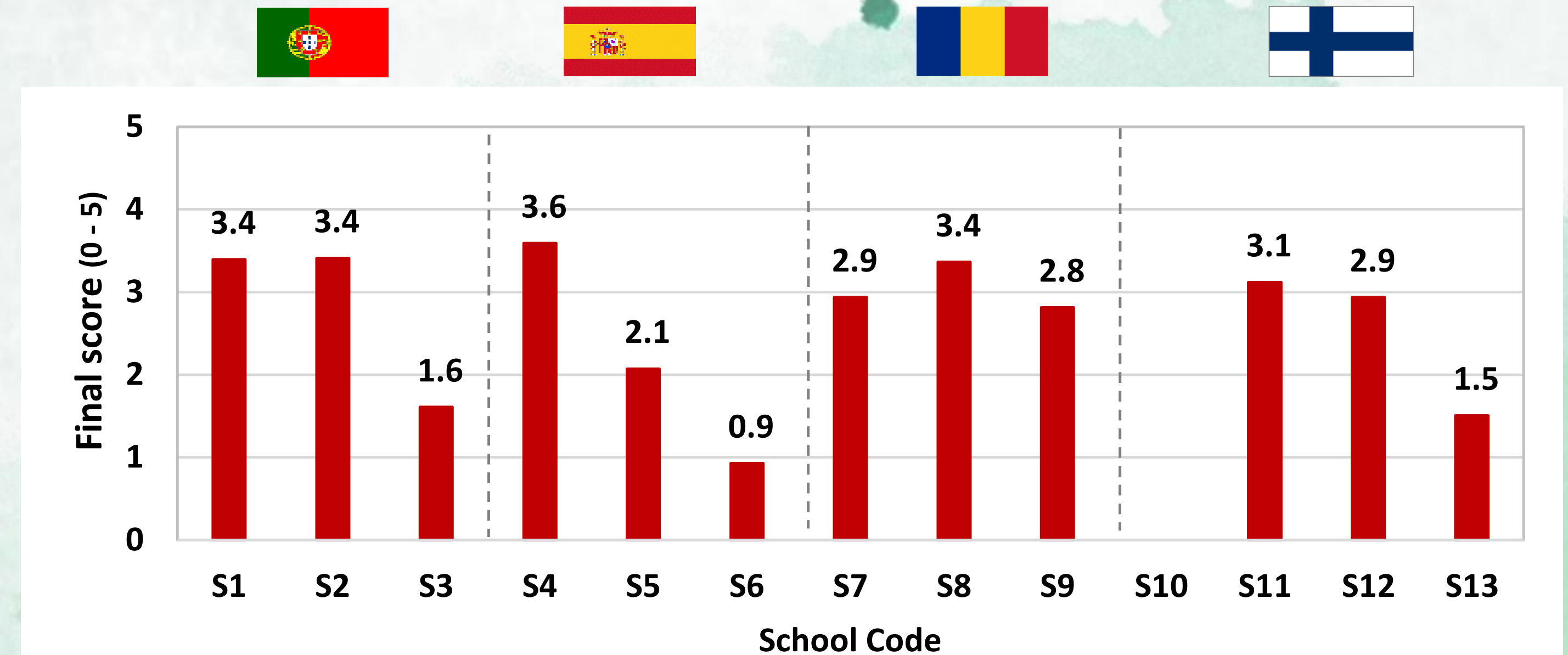


Figure 4- Final score of the energy sector.

Final notes

- The baseline assessment of environmental performance carried out at the pilot schools is geared towards ECF definition, analysis, and support within the framework of GreenComp.
- The methodology was defined and applied before the application of project measures and will be applied and evaluated in the next stages of the project. This continuous evaluation in a living procedure format, where the entire school community is involved in all stages of the process, serves as a tool to monitor progress and evaluate the improvement of ECF competences.
- It is important to highlight that, due to a wide variety of factors, as the variability of the climate conditions of the countries, the student's ages, the socioeconomic level of these students' families, and also the economic potential of the local and national authorities to invest in their schools, the analysis of the ECF4CLIM score intended to show to the schools how they can improve their performance, rather than compare them.