

Environmental accounting for the true impact of a firm's carbon emissions/ Aplinkos apskaita, skirta tikrajam įmonės anglies dioksido emisijų poveikiui įvertinti

We see that there is an unambiguous correlation (and plausible causality) between the increase in the wealth creating human activity and the increase in the CO₂ emitted to the atmosphere, where science alarmingly tells us the planet will not be habitable for human life if the global temperature rises (caused by the increased greenhouse gases) above 2 degrees Celsius relative to the preindustrial levels. Tregida and Laine (2022), see a lack of urgency in our response to this climate / environmental emergency and call for research to investigate on the type of environmental accounting numbers would serve in creating positive hope in societies. This is a relatively new and evolving area, and the exact research topic can be developed in conjunction with the supervisor, hence related research themes in this area are encouraged, some of which are listed below.

I. Innovations in Carbon pricing & Accounting, ETS schemes, carbon arbitrage and their effectiveness

II. Real options applications in climate finance and its reporting aspects

III. Relationship between Green bond issuance / green financial innovations and the reduction of firm's emissions/improvement of a firm's environmental performance

IV. Quantification of biodiversity risk into capital markets

The study should be original listing out important implications to policy makers, lenders and other stakeholders. For example, the research can give policy level recommendation for an equitable carbon tax regime, carbon credits or any tax concessions to incentivise performance, or by lenders in a funding decision, akin to reduced mortgage rates for A+ energy efficient residences. The prospective PhD student should have a solid quantitative background (e.g. stochastic mathematics, econometrics, programming skills) and a good command of English, in terms of speaking and writing.

Students without strong motivation in this area are encouraged not to apply as a reasonable amount of prior knowledge and the willingness to self-learn is expected. The chosen student will be working as a part of a wider research team, and at least one ABS 3 or above level publication, where the student will play a leading role, is expected before the completion of the PhD.