

Asset-Level ESG-Rating Assessment of Weights-Matrix

ESG is composed of environmental, social, and governance factors. By analyzing different building certification programs, one can identify reoccurring ESG-KPIs. However, no uniform weight system is present as the focus of certification programs differs.

This study aims to link certification programs according to reoccurring factors, identify their program-specific weights, and create a uniform ESG weighting methodology.

Expectation:

- Literature review regarding existing asset-level ESG-KPIs and summarization of program-specific weights of ESG-KPIs.
- Literature review on processes to uniformly weigh factors across categories.
- Complementing the existing ESG framework (provided by the supervisor).
- Identify individual weights for ESG-KPIs across the ESG framework by applying analytical processes (for example, AHP).

Suggested Literature:

Bolat et al. (2020). Weighting Key Factors for Port Congestion by AHP Method, Journal of ETA Maritime Science.

Odu, Godwin (2019). Weighting methods for multi-criteria decision making technique. Journal of Applied Sciences and Environmental Management.

Atanasova-Pacemaska, Tatjana et al. (2014). Analytical Hierarchical Process (AHP) method application in the process of selection and evaluation. In: UNITECH '14 - International Scientific Conference, 21-22

Barzilai, J. (1997). Deriving weights from pairwise comparison matrices. Journal of the Operational Research Society, 48, 1226–1232

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