REFERENCES

Abdel-basset, M., Manogaran, G., Gamal, A., & Smarandache, F. (2019). *A Group Decision Making Framework Based on Neutrosophic TOPSIS Approach for Smart Medical Device Selection*.

Abeysundra, U. G. Y., Babel, S., Gheewala, S., & Sharp, A. (2007). Environmental, economic and social analysis of materials for doors and windows in Sri Lanka. *Building and Environment*, *42*(5), 2141–2149. https://doi.org/10.1016/j.buildenv.2006.04.005

AbouHamad, M., & Abu-Hamd, M. (2019). Framework for construction system selection based on life cycle cost and sustainability assessment. *Journal of Cleaner Production*, *241*. https://doi.org/10.1016/j.jclepro.2019.118397

Akadiri, O. P. (2011). Development of a multi-criteria approach for the selection of sustainable materials for building projects. *PhD Thesis - University of Wolverhampton*, 1–437. http://wlv.openrepository.com/wlv/bitstream/2436/129918/1/Akadiri_PhD thesis.pdf

Akadiri, P. O., Olomolaiye, P. O., & Chinyio, E. A. (2013a). Multi-criteria evaluation model for the selection of sustainable materials for building projects. *Automation in Construction*, *30*, 113–125. https://doi.org/https://doi.org/10.1016/j.autcon.2012.10.004

Akadiri, P. O., Olomolaiye, P. O., & Chinyio, E. A. (2013b). Multi-criteria evaluation model for the selection of sustainable materials for building projects. *Automation in Construction*, *30*, 113–125. https://doi.org/10.1016/j.autcon.2012.10.004

Alibaba, H. Z., & Özdeniz, M. B. (2004). A building elements selection system for architects. *Building and Environment*, *39*(3), 307–316. https://doi.org/10.1016/j.buildenv.2003.09.010

Amer, M., & Attia, S. (2019). Identification of sustainable criteria for decision-making

on roof stacking construction method. *Sustainable Cities and Society*, *47*(June 2018), 101456. https://doi.org/10.1016/j.scs.2019.101456

Ammarapala, V., Chinda, T., Pongsayaporn, P., Ratanachot, W., Punthutaecha, K., & Janmonta, K. (2018). Cross-border shipment route selection utilizing analytic hierarchy process (AHP) method. *Songklanakarin Journal of Science and Technology*, *40*(1), 31–37. https://doi.org/10.14456/sjst-psu.2018.3

Aneesh, N. R., Shivaprasad, K. N., & Das, B. B. (2018). Life cycle energy analysis of a metro station building envelope through computer based simulation. *Sustainable Cities and Society*, *39*, 135–143. https://doi.org/10.1016/j.scs.2018.02.006

Ashby, M. F., Bréchet, Y. J. M., Cebon, D., & Salvo, L. (2004). Selection strategies for materials and processes. *Materials & Design*, *25*(1), 51–67. https://doi.org/https://doi.org/10.1016/S0261-3069(03)00159-6

Asif, M., Muneer, T., & Kelley, R. (2007). Life cycle assessment: A case study of a dwelling home in Scotland. *Building and Environment*, *42*(3), 1391–1394. https://doi.org/https://doi.org/10.1016/j.buildenv.2005.11.023

Benoît-Norris, C., Vickery-Niederman, G., Valdivia, S., Franze, J., Traverso, M., Ciroth, A., & Mazijn, B. (2011). Introducing the UNEP/SETAC methodological sheets for subcategories of social LCA. *The International Journal of Life Cycle Assessment 2011 16:7*, *16*(7), 682–690. https://doi.org/10.1007/S11367-011-0301-Y

Braimah, N., & Ndekugri, I. (2009). Consultants' Perceptions on Construction Delay Analysis Methodologies. *Journal of Construction Engineering and Management*, *135*(12), 1279–1288. https://doi.org/10.1061/(asce)co.1943-7862.0000096

Brauers, W. K. M., & Zavadskas, E. K. (2006). *The MOORA method and its application to privatization in a transition economy by A new method : the MOORA method*. *35*(2).

Brauers, W. K. M., & Zavadskas, E. K. (2010). *Project management by multimoora as an instrument for transition economies*. *8619*. https://doi.org/10.3846/tede.2010.01

Bruce-Hyrkäs, T., Pasanen, P., & Castro, R. (2018). Overview of Whole Building Life-Cycle Assessment for Green Building Certification and Ecodesign through Industry Surveys and Interviews. *Procedia CIRP*, *69*(May), 178–183. https://doi.org/10.1016/j.procir.2017.11.127

Brunner, R. (1991). Global climate change: defining the policy problem. *Policy Sciences*, *24*(3). https://doi.org/10.1007/BF00186331

Bull, J. W. (2003). *Life cycle costing for construction*. Routledge.

Bullinger, H. J., Bauer, W., Wenzel, G., & Blach, R. (2010). Towards user centred design (UCD) in architecture based on immersive virtual environments. *Computers in Industry*, *61*(4), 372–379. https://doi.org/10.1016/j.compind.2009.12.003

Bundgaard, A. M., Mosgaard, M. A., & Remmen, A. (2017). From energy efficiency towards resource efficiency within the Ecodesign Directive. *Journal of Cleaner Production*, *144*(2017), 358–374. https://doi.org/10.1016/j.jclepro.2016.12.144

Castro-Lacouture, D., Sefair, J. A., Flórez, L., & Medaglia, A. L. (2009). Optimization model for the selection of materials using a LEED-based green building rating system in Colombia. *Building and Environment*, *44*(6), 1162–1170. https://doi.org/10.1016/J.BUILDENV.2008.08.009

Chan, F. T. S., & Kumar, N. (2007). Global supplier development considering risk factors using fuzzy extended AHP-based approach. *Omega*, *35*(4), 417–431. https://doi.org/https://doi.org/10.1016/j.omega.2005.08.004

Chen, Y., & Thomas Ng, S. (2016). Factoring in embodied GHG emissions when assessing the environmental performance of building. *Sustainable Cities and Society*, *27*, 244–252. https://doi.org/10.1016/j.scs.2016.03.015

Cicconi, P. (2020). Eco-design and Eco-materials: An interactive and collaborative approach. *Sustainable Materials and Technologies*, *23*, e00135. https://doi.org/10.1016/j.susmat.2019.e00135

Corrente, S., & Tasiou, M. (2022). Jou rna lP. *Expert Systems With Applications*, 119045. https://doi.org/10.1016/j.eswa.2022.119045

Dalhammar, C. (2015). The Application of 'life cycle thinking' in European environmental law: theory and practice. *Journal for European Environmental & Planning Law*, *12*(2), 97–127. https://doi.org/https://doi.org/10.1163/18760104-01202002

Day, J., & Bobeva, M. (2005). A generic toolkit for the successful management of delphi studies. *Electronic Journal of Business Research Methods*, *3*(2), 103–116.

Dekoninck, E. A., Domingo, L., O'Hare, J. A., Pigosso, D. C. A., Reyes, T., & Troussier, N. (2016). Defining the challenges for ecodesign implementation in companies: Development and consolidation of a framework. *Journal of Cleaner Production*, *135*, 410–425. https://doi.org/10.1016/j.jclepro.2016.06.045

Dimitrokali, E., Hartungi, R., & Howe, J. (2010). The applicability of LCA to assess environmental impacts of building technologies in buildings. *The 16th Annual International Sustainable Development Research Conference*.

Dissanayake, D. M. K. W., Jayasinghe, C., & Jayasinghe, M. T. R. (2017). A comparative embodied energy analysis of a house with recycled expanded polystyrene (EPS) based foam concrete wall panels. *Energy and Buildings*, *135*, 85–94. https://doi.org/10.1016/j.enbuild.2016.11.044

Dixit, M. K., Fernández-Solís, J. L., Lavy, S., & Culp, C. H. (2010). Identification of parameters for embodied energy measurement: A literature review. *Energy and Buildings*, *42*(8), 1238–1247.

Donohoe, H. M., & Needham, R. D. (2009). Moving best practice forward: Delphi characteristics, advantages, potential problems, and solutions. *International*

Journal of Tourism Research, *11*(5), 415–437. https://doi.org/10.1002/jtr.709

Dwaikat, L. N., & Ali, K. N. (2018). Green buildings life cycle cost analysis and life cycle budget development: Practical applications. *Journal of Building Engineering*, *18*(April 2016), 303–311. https://doi.org/10.1016/j.jobe.2018.03.015

Emmanuel, R. (2004). Estimating the environmental suitability of wall materials: Preliminary results from Sri Lanka. *Building and Environment*, *39*(10), 1253–1261. https://doi.org/10.1016/j.buildenv.2004.02.012

Ezekiel A., C., Paulo, O., & Corbett, P. (1998). Quantification of Construction Clients' Needs. *Journal of Management in Engineering*, *14*(1), 87–92.

Ferrández-García, A., Ibáñez-Forés, V., & Bovea, M. D. (2016). Eco-efficiency analysis of the life cycle of interior partition walls: A comparison of alternative solutions. *Journal of Cleaner Production*, *112*(1), 649–665. https://doi.org/10.1016/j.jclepro.2015.07.136

Flanagan, R., Jewell, C., & Norman, G. (2005). *Whole life appraisal for construction*. Wiley Online Library.

Franklin, K. K., & Hart, J. K. (2007). Idea generation and exploration: Benefits and limitations of the policy delphi research method. *Innovative Higher Education*, *31*(4), 237–246. https://doi.org/10.1007/s10755-006-9022-8

Grisham, T. (2009). The Delphi technique: a method for testing complex and multifaceted topics. *International Journal of Managing Projects in Business*, *2*(1), 112–130. https://doi.org/10.1108/17538370910930545

Gurupatham, S. V, Jayasinghe, C., & Perera, P. (2021). Ranking of walling materials using eco-efficiency for tropical climatic conditions: A survey-based approach. *Energy and Buildings*, 111503. https://doi.org/https://doi.org/10.1016/j.enbuild.2021.111503

Hallowell, M. R., & Gambatese, J. A. (2010). Qualitative Research: Application of the Delphi Method to CEM Research. *Journal of Construction Engineering and Management*, *136*(1), 99–107. https://doi.org/10.1061/(asce)co.1943-7862.0000137

Halwatura, R. U., & Jayasinghe, M. T. R. (2009). Influence of insulated roof slabs on air conditioned spaces in tropical climatic conditions-A life cycle cost approach. *Energy and Buildings*, *41*(6), 678–686. https://doi.org/10.1016/j.enbuild.2009.01.005

Hasson, F., & Keeney, S. (2011). Enhancing rigour in the Delphi technique research. *Technological Forecasting and Social Change*, *78*(9), 1695–1704. https://doi.org/10.1016/j.techfore.2011.04.005

Heravi, G., & Abdolvand, M. M. (2019). Assessment of water consumption during production of material and construction phases of residential building projects. *Sustainable Cities and Society*, *51*(May), 101785. https://doi.org/10.1016/j.scs.2019.101785

Heravi, G., Fathi, M., & Faeghi, S. (2017). Multi-criteria group decision-making method for optimal selection of sustainable industrial building options focused on petrochemical projects. *Journal of Cleaner Production*, *142*, 2999–3013. https://doi.org/10.1016/j.jclepro.2016.10.168

Hinchliffe, D., & Akkerman, F. (2017). Assessing the review process of EU Ecodesign regulations. *Journal of Cleaner Production*, *168*, 1603–1613. https://doi.org/10.1016/j.jclepro.2017.03.091

Ho, W., Xu, X., & Dey, P. K. (2010). Multi-criteria decision making approaches for supplier evaluation and selection: A literature review. *European Journal of Operational Research*, *202*(1), 16–24.

Hoła, J., & Schabowicz, K. (2010). State-of-the-art non-destructive methods for diagnostic testing of building structures - anticipated development trends. *Archives of Civil and Mechanical Engineering*, *10*(3), 5–18.

https://doi.org/10.1016/s1644-9665(12)60133-2

Holden, E., Linnerud, K., & Banister, D. (2014). Sustainable development: Our Common Future revisited. *Global Environmental Change*, *26*(1), 130–139. https://doi.org/10.1016/j.gloenvcha.2014.04.006

Hong, J., Shen, G. Q., Feng, Y., Lau, W. S. T., & Mao, C. (2015). Greenhouse gas emissions during the construction phase of a building: A case study in China. *Journal of Cleaner Production*, *103*, 249–259. https://doi.org/10.1016/j.jclepro.2014.11.023

Hossaini, N., Reza, B., Akhtar, S., Sadiq, R., & Hewage, K. (2014). AHP based life cycle sustainability assessment (LCSA) framework: a case study of six storey wood frame and concrete frame buildings in Vancouver. *Journal of Environmental Planning and Management*, *October 2014*, 1–25. https://doi.org/10.1080/09640568.2014.920704

Hossaini, N., Reza, B., Akhtar, S., Sadiq, R., & Hewage, K. (2015). AHP based life cycle sustainability assessment (LCSA) framework: a case study of six storey wood frame and concrete frame buildings in Vancouver. *Journal of Environmental Planning and Management*, *58*(7), 1217–1241. https://doi.org/10.1080/09640568.2014.920704

ISO, B. S. I. (2008). 15686-5, BS ISO 15686-5: 2008-Buildings & constructed assets− Service life planning− Part 5: Life cycle costing. In *Int. Stand*.

ISO, I. S. O. (2011). 14006: 2011: Environmental management systems–Guidelines for incorporating ecodesign. *Geneva: International Organization for Standardization*.

Jaskowski, P., Biruk, S., & Bucon, R. (2010). Assessing contractor selection criteria weights with fuzzy AHP method application in group decision environment. *Automation in Construction*, *19*(2), 120–126. https://doi.org/10.1016/j.autcon.2009.12.014

Jayasinghe, C. and Jayasinghe, T. (2009). Sustainable Design of Built Environments, Eco Ceylon (Pvt.) Limited,. *Colombo, Sri Lanka.*

Jayasinghe, M. T. R.,"Energy Efficient Houses for Tropical Climates", MacBolon Polymer , Sri Lanka , 180 p, 2003 (ISBN 955-8872-00-8). (n.d.).

Jayasinghe, C., Fonseka, W. M. C. D. J., & Abeygunawardhene, Y. M. (2016). Load bearing properties of composite masonry constructed with recycled building demolition waste and cement stabilized rammed earth. *Construction and Building Materials*, *102*, 471–477. https://doi.org/10.1016/j.conbuildmat.2015.10.136

Jayasinghe, C., & Kamaladasa, N. (2007). Compressive strength characteristics of cement stabilized rammed earth walls. *Construction and Building Materials*, *21*(11), 1971–1976. https://doi.org/10.1016/j.conbuildmat.2006.05.049

Jayasinghe, Chintha. (2011). Embodied energy of alternative building materials and their impact on life cycle cost parameters. *International Conference on Structural Engineering, Construction and Management, December 16-18, 2011, Kandy, Sri Lanka*, *January*, 1–20. https://doi.org/10.13140/RG.2.1.4852.2321

Jayasinghe, Chintha, Jayathilake, D., & Dissanayake, B. (2016). *Thermal Performance of Composite Walls Made Out Of Recycled Building Waste and Stabilized Rammed Earth*.

Joshi, D., & Kumar, S. (2016). Interval-valued intuitionistic hesitant fuzzy Choquet integral based TOPSIS method for multi-criteria group decision making. *European Journal of Operational Research*, *248*(1), 183–191. https://doi.org/https://doi.org/10.1016/j.ejor.2015.06.047

Jun, Y. S., Kang, H. Y., Jo, H. J., Baek, C. Y., & Kim, Y. C. (2019). Evaluation of environmental impact and benefits for remanufactured construction equipment parts using Life Cycle Assessment. *Procedia Manufacturing*, *33*, 288–295. https://doi.org/10.1016/j.promfg.2019.04.035

Kamali, M., & Hewage, K. (2016). Development of performance criteria for

sustainability evaluation of modular versus conventional construction methods. *Journal of Cleaner Production*. https://doi.org/10.1016/j.jclepro.2016.10.108

Karayalcin, I. I. (1982). The analytic hierarchy process: Planning, priority setting, resource allocation: Thomas L. SAATY McGraw-Hill, New York, 1980, xiii + 287 pages, £15.65. *European Journal of Operational Research*, *9*, 97–98.

Kariyawasam, K. K. G. K. D., & Jayasinghe, C. (2016). Cement stabilized rammed earth as a sustainable construction material. *Construction and Building Materials*, *105*, 519–527. https://doi.org/10.1016/j.conbuildmat.2015.12.189

Kirk, S. J., & Dell'Isola, A. J. (1995). *Life cycle costing for design professionals*.

Kore, N. B., Ravi, K., & Patil, S. B. (2017). A Simplified Description of FUZZY TOPSIS Method for Multi Criteria Decision Making. *International Research Journal of Engineering and Technology*, *4*(5), 2395–56.

Kota, S. K., & Kalyana Rama, J. S. (2020). Impact of locally available sustainable materials on the overall economy of the construction sector - A review. *Materials Today: Proceedings*, *43*, 1103–1109. https://doi.org/10.1016/j.matpr.2020.08.343

Kotrlik, J., & Higgins, C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, *19*(1), 43.

Krawczyńska-Piechna, A. (2017). Comprehensive Approach to Efficient Planning of Formwork Utilization on the Construction Site. *Procedia Engineering*, *182*, 366–372. https://doi.org/10.1016/j.proeng.2017.03.114

Kubba, S. (2012a). Green Building Materials and Products. *Handbook of Green Building Design and Construction*, 227–311. https://doi.org/10.1016/b978-0-12-385128-4.00006-8

Kubba, S. (2012b). *Handbook of green building design and construction: LEED,*

BREEAM, and Green Globes. Butterworth-Heinemann.

Kulshreshtha, Y., Mota, N. J. A., Jagadish, K. S., Bredenoord, J., Vardon, P. J., van Loosdrecht, M. C. M., & Jonkers, H. M. (2020). The potential and current status of earthen material for low-cost housing in rural India. *Construction and Building Materials*, *247*, 118615. https://doi.org/10.1016/j.conbuildmat.2020.118615

Kumanayake, R., Luo, H., & Paulusz, N. (2018). Assessment of material related embodied carbon of an office building in Sri Lanka. *Energy and Buildings*, *166*, 250–257. https://doi.org/10.1016/j.enbuild.2018.01.065

Kurnianingsih, Nugroho, L. E., Widyawan, Lazuardi, L., Ferdiana, R., & Selo. (2014). Perspectives of human centered design and interoperability in ubiquitous home care for elderly people. *Proceeding - 2014 Makassar International Conference on Electrical Engineering and Informatics, MICEEI 2014*, *November*, 118–123. https://doi.org/10.1109/MICEEI.2014.7067323

Lambrechts, W., Gelderman, C. J., Semeijn, J., & Verhoeven, E. (2019). The role of individual sustainability competences in eco-design building projects. *Journal of Cleaner Production*, *208*, 1631–1641. https://doi.org/10.1016/j.jclepro.2018.10.084

Lee, J. W., Jung, H. J., Park, J. Y., Lee, J. B., & Yoon, Y. (2013). Optimization of building window system in Asian regions by analyzing solar heat gain and daylighting elements. *Renewable Energy*, *50*, 522–531. https://doi.org/10.1016/j.renene.2012.07.029

Li, D. F., & Yang, J. B. (2004). Fuzzy linear programming technique for multiattribute group decision making in fuzzy environments. *Information Sciences*, *158*(1–4), 263–275. https://doi.org/10.1016/j.ins.2003.08.007

Li, S., Lu, Y., Kua, H. W., & Chang, R. (2020). The economics of green buildings: A life cycle cost analysis of non-residential buildings in tropic climates. *Journal of Cleaner Production*, *252*, 119771. https://doi.org/10.1016/j.jclepro.2019.119771

Lu, Y., Le, V. H., & Song, X. (2017). Beyond Boundaries: A Global Use of Life Cycle Inventories for Construction Materials. *Journal of Cleaner Production*, *156*, 876–887. https://doi.org/10.1016/j.jclepro.2017.04.010

Lucas, C., Leith, P., & Davison, A. (2015). How climate change research undermines trust in everyday life: a review. *Wiley Interdisciplinary Reviews: Climate Change*, *6*(1), 79–91. https://doi.org/10.1002/wcc.320

Malcolm, R. (2011). Ecodesign Laws and the Environmental Impact of our Consumption of Products. *Journal of Environmental Law*, *23*(3), 487–503. https://doi.org/10.1093/jel/eqr029

Mann, M. E., Bradley, R. S., & Hughes, M. K. (1998). Global-scale temperature patterns and climate forcing over the past six centuries. *Nature*, *392*(6678), 779–787. https://doi.org/10.1038/33859

Méda, Z. C., Lin, Y.-T., Sombié, I., Maré, D., Morisky, D. E., & Chen, Y.-M. A. (2014). Medication-adherence predictors among patients with tuberculosis or human immunodeficiency virus infection in Burkina Faso. *Journal of Microbiology, Immunology and Infection*, *47*(3), 222–232. https://doi.org/https://doi.org/10.1016/j.jmii.2013.05.001

Medineckiene, M., Zavadskas, E. K., & Turskis, Z. (2011). Dwelling selection by applying fuzzy game theory. *Archives of Civil and Mechanical Engineering*, *11*(3), 681–697. https://doi.org/10.1016/s1644-9665(12)60109-5

Melón, M. G., Beltran, P. A., & Cruz, M. C. G. (2008). An AHP-based evaluation procedure for Innovative Educational Projects: A face-to-face vs. computer-mediated case study. *Omega*, *36*(5), 754–765.

Mesa, J., González-Quiroga, A., & Maury, H. (2020). Developing an indicator for material selection based on durability and environmental footprint: A Circular Economy perspective. *Resources, Conservation and Recycling*, *160*(May), 104887. https://doi.org/10.1016/j.resconrec.2020.104887

Milagre Martins, I. M., & Gonçalves, A. (2012). *Sustainability of construction materials: an overview*.

Mudiyanselage, D., & Widvanga, K. (2018). *Embodied Energy Analysis of a Precast Embodied Energy Analysis of a Precast*. *February*.

Mullen, P. M. (2003). Delphi: myths and reality. *Journal of Health Organization and Management*, *17*(1), 37–52. https://doi.org/10.1108/14777260310469319

Nadaban, S., Dzitac, S., & Dzitac, I. (2016). Fuzzy TOPSIS : A General View. *Procedia Computer Sceince 91*, *91*(Itqm), 823–831. https://doi.org/10.1016/j.procs.2016.07.088

Nassar, K., Thabet, W., & Beliveau, Y. (2003). A procedure for multi-criteria selection of building assemblies. *Automation in Construction*, *12*, 543–560. https://doi.org/10.1016/S0926-5805(03)00007-4

Negny, S., Belaud, J. P., Cortes Robles, G., Roldan Reyes, E., & Ferrer, J. B. (2012). Toward an eco-innovative method based on a better use of resources: application to chemical process preliminary design. *Journal of Cleaner Production*, *32*, 101–113. https://doi.org/https://doi.org/10.1016/j.jclepro.2012.03.023

Norman, G. (1990). Life cycle costing. *Property Management*, *8*(4), 344–356. https://doi.org/10.1108/EUM0000000003380

Nunnally, J. C., & Nunnaly, J. C. (1978). *Psychometric Theory*. McGraw-Hill. https://books.google.lk/books?id=WE59AAAAMAAJ

Ogbeifun, E., Agwa-Ejon, J., Mbohwa, C., & Pretorius, J. H. C. (2016). The Delphi technique: A credible research methodology. *Proceedings of the International Conference on Industrial Engineering and Operations Management, 8-10 March*, 2004–2009.

Ölçer, A. I., & Odabaşi, A. Y. (2005). A new fuzzy multiple attributive group decision making methodology and its application to propulsion/manoeuvring system

selection problem. *European Journal of Operational Research*, *166*(1 SPEC. ISS.), 93–114. https://doi.org/10.1016/j.ejor.2004.02.010

Olomolaiye, P. O., Wahab, K. A., & Price, A. D. F. (1987). Problems influencing craftsmen's productivity in Nigeria. *Building and Environment*, *22*(4), 317–323. https://doi.org/https://doi.org/10.1016/0360-1323(87)90024-2

Olson, J. S., & Kellogg, W. A. (2014). Ways of Knowing in HCI. *Springer New York*.

Omer, M. A. B., & Noguchi, T. (2020). A conceptual framework for understanding the contribution of building materials in the achievement of Sustainable Development Goals (SDGs). *Sustainable Cities and Society*, *52*(May 2019), 101869. https://doi.org/10.1016/j.scs.2019.101869

Ortiz, O., Pasqualino, J. C., & Castells, F. (2010). Environmental performance of construction waste: Comparing three scenarios from a case study in Catalonia, Spain. *Waste Management*, *30*(4), 646–654.

Pedersen Zari, M. (2019). Ecosystem services impacts as part of building materials selection criteria. *Materials Today Sustainability*, *3–4*, 100010. https://doi.org/10.1016/j.mtsust.2019.100010

Perera, P., Hewage, K., Alam, M. S., Mèrida, W., & Sadiq, R. (2018). Scenario-based economic and environmental analysis of clean energy incentives for households in Canada: Multi criteria decision making approach. *Journal of Cleaner Production*, *198*, 170–186. https://doi.org/10.1016/j.jclepro.2018.07.014

Perera, P., Hewage, K., Alarti, M. S., & Sadiq, R. (2017). Eco-efficiency analysis of recycled material for residential construction: A case study of Okanagan (BC). *6th CSCE-CRC International Construction Specialty Conference 2017 - Held as Part of the Canadian Society for Civil Engineering Annual Conference and General Meeting 2017*, *1*(Jeffery 2011), 525–534.

Peuportier, B., Thiers, S., & Guiavarch, A. (2013). Eco-design of buildings using thermal simulation and life cycle assessment. *Journal of Cleaner Production*, *39*,

73–78. https://doi.org/10.1016/j.jclepro.2012.08.041

Rahman, S., Odeyinka, H., Perera, S., & Bi, Y. (2012). Product-cost modelling approach for the development of a decision support system for optimal roofing material selection. *Expert Systems with Applications*, *39*(8), 6857–6871. https://doi.org/https://doi.org/10.1016/j.eswa.2012.01.010

Ramesh, T, Prakash, R., & Shukla, K. K. (2010). Life cycle energy analysis of buildings: An overview. *Energy and Buildings*, *42*(10), 1592–1600. https://doi.org/10.1016/j.enbuild.2010.05.007

Ramesh, Thillai, Prakash, R., & Shukla, K. K. (2014). Life Cycle Energy of Low Rise Residential Buildings in Indian Context. *Open Journal of Energy Efficiency*, *3*, 108–118. https://doi.org/10.4236/ojee.2014.34012

Reza, B., Sadiq, R., & Hewage, K. (2011). Sustainability assessment of flooring systems in the city of Tehran: An AHP-based life cycle analysis. *Construction and Building Materials*, *25*(4), 2053–2066. https://doi.org/10.1016/j.conbuildmat.2010.11.041

Rio, M., Reyes, T., & Roucoules, L. (2013). Toward proactive (eco)design process: Modeling information transformations among designers activities. *Journal of Cleaner Production*, *39*, 105–116. https://doi.org/10.1016/j.jclepro.2012.07.061

Rossi, M., Germani, M., & Zamagni, A. (2016). Review of ecodesign methods and tools. Barriers and strategies for an effective implementation in industrial companies. *Journal of Cleaner Production*, *129*, 361–373. https://doi.org/10.1016/j.jclepro.2016.04.051

Ruuska, A., & Häkkinen, T. (2014). Material efficiency of building construction. *Buildings*, *4*(3), 266–294. https://doi.org/10.3390/buildings4030266

Saaty, R. W. (1987). The analytic hierarchy process—what it is and how it is used. *Mathematical Modelling*, *9*(3–5), 161–176.

Saaty, T., & Shang, J. (2011). An Innovative Orders-of-Magnitude Approach to AHP-Based Multicriteria Decision Making: Prioritizing Divergent Intangible Humane Acts. *European Journal of Operational Research*, *214*, 703–715. https://doi.org/10.1016/j.ejor.2011.05.019

Saaty, T L. (1980). *The Analytic Hierarchy Process: Planning, Priority Setting, Resource Allocation*. McGraw-Hill International Book Company. https://books.google.lk/books?id=Xxi7AAAAIAAJ

Saaty, T L. (1994). *Fundamentals of Decision Making and Priority Theory with the Analytic Hierarchy Process*. RWS Publications. https://books.google.lk/books?id=nmtaAAAAYAAJ

Saaty, Thomas L. (1990). How to make a decision: the analytic hierarchy process. *European Journal of Operational Research*, *48*(1), 9–26.

Saaty, Thomas L. (2008). Relative measurement and its generalization in decision making why pairwise comparisons are central in mathematics for the measurement of intangible factors the analytic hierarchy/network process. *RACSAM - Revista de La Real Academia de Ciencias Exactas, Fisicas y Naturales. Serie A. Matematicas*, *102*(2), 251–318. https://doi.org/10.1007/BF03191825

Sagheb, A., Vafaeihosseini, E., & Kumar, R. P. (2011). *the Role of Building Construction Materials on Global*. *March*, 175–178.

Sahlol, D. G., Elbeltagi, E., Elzoughiby, M., & Abd Elrahman, M. (2021). Sustainable building materials assessment and selection using system dynamics. *Journal of Building Engineering*, *35*, 101978. https://doi.org/10.1016/j.jobe.2020.101978

Schabowicz, K. (2015). Modern acoustic techniques for testing concrete structures accessible from one side only. *Archives of Civil and Mechanical Engineering*, *15*(4), 1149–1159. https://doi.org/10.1016/j.acme.2014.10.001

Schabowicz, Krzysztof. (2021). Testing of materials and elements in civil engineering.

Materials, *14*(12). https://doi.org/10.3390/ma14123412

Seo, S., Tucker, S., & Ambrose, M. (2004). Selection of Sustainable Building Material Using LCADesign Tool. *Analysis*, 87–94.

Shapira, A., Asce, M., & Goldenberg, M. (2006). *AHP-Based Equipment Selection Model for Construction Projects*. *131*(12), 1263–1273.

Stocker, T. F., Qin, D., Plattner, G. K., Tignor, M. M. B., Allen, S. K., Boschung, J., Nauels, A., Xia, Y., Bex, V., & Midgley, P. M. (2013). Climate change 2013 the physical science basis: Working Group I contribution to the fifth assessment report of the intergovernmental panel on climate change. *Climate Change 2013 the Physical Science Basis: Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, *9781107057*, 1–1535. https://doi.org/10.1017/CBO9781107415324

Szewczak, E., Winkler-Skalna, A., & Czarnecki, L. (2020). Sustainable test methods for construction materials and elements. *Materials*, *13*(3). https://doi.org/10.3390/ma13030606

Thevarajah, B. E., Jayasinghe, M. T. R., Lewangamage, C. S., & Ibell, T. J. (2020). Embodied Energy and Carbon Footprint of Two Storied Refuge Space with Lightweight Load Bearing Panels. *2020 Moratuwa Engineering Research Conference (MERCon)*, 19–24.

Thormark, C. (2006). The effect of material choice on the total energy need and recycling potential of a building. *Building and Environment*, *41*(8), 1019–1026. https://doi.org/https://doi.org/10.1016/j.buildenv.2005.04.026

Troyer, W. (1990). *Preserving Our World: A Consumer's Guide to the Brundtland Report* (Vol. 4). National Round Table.

Udawattha, C., & Halwatura, R. (2017). Life cycle cost of different Walling material used for affordable housing in tropics. *Case Studies in Construction Materials*, *7*(April), 15–29. https://doi.org/10.1016/j.cscm.2017.04.005

Udawattha, C., & Halwatura, R. (2018). Thermal performance and structural cooling analysis of brick, cement block, and mud concrete block. *Advances in Building Energy Research*, *12*(2), 150–163. https://doi.org/10.1080/17512549.2016.1257438

Ugwu, O. O., Kumaraswamy, M. M., Wong, A., Ng, S. T., Wang, H., Bai, H., Liu, J., & Xu, H. (2006). Measurement indicators and an evaluation approach for assessing Strategic Environmental Assessment effectiveness. *Ecological Indicators*, *23*(2), 413–420. https://doi.org/https://doi.org/10.1016/j.autcon.2005.05.006

United Nations Environment Program. (2009). *Common Carbon Metric. For measuring Energy Use & reporting Greenhouse Gas Emissions from building operations*. 28.

Wang, H., Bai, H., Liu, J., & Xu, H. (2012). Measurement indicators and an evaluation approach for assessing Strategic Environmental Assessment effectiveness. *Ecological Indicators*, *23*, 413–420. https://doi.org/https://doi.org/10.1016/j.ecolind.2012.04.021

Wang, N., Chang, Y.-C., & El-Sheikh, A. A. (2010). Monte Carlo simulation approach to life cycle cost management. *Http://Dx.Doi.Org/10.1080/15732479.2010.481304*, *8*(8), 739–746. https://doi.org/10.1080/15732479.2010.481304

Wen, B., Musa, N., Onn, C. C., Ramesh, S., Liang, L., & Wang, W. (2020). Evolution of sustainability in global green building rating tools. *Journal of Cleaner Production*, *259*, 120912. https://doi.org/10.1016/j.jclepro.2020.120912

Wheating, N. C. (2017). *USF Scholarship: a digital repository @ Gleeson Library | Geschke Center Embodied carbon: A framework for prioritizing and reducing emissions in the building industry*. https://repository.usfca.edu/capstone

Wijnants, L., Allacker, K., & De Troyer, F. (2019). Life-cycle assessment of timber frame constructions – The case of rooftop extensions. *Journal of Cleaner*

Production, *216*, 333–345. https://doi.org/10.1016/j.jclepro.2018.12.278

Wong, J. K. W., & Li, H. (2008). Application of the analytic hierarchy process (AHP) in multi-criteria analysis of the selection of intelligent building systems. *Building and Environment*, *43*(1), 108–125. https://doi.org/https://doi.org/10.1016/j.buildenv.2006.11.019

Xia, bo, & Chan, A. P. c. (2012). Measuring complexity for building projects: A Delphi study. *Engineering, Construction and Architectural Management*, *19*(1), 7–24. https://doi.org/10.1108/09699981211192544

Yahya, K., & Boussabaine, H. (2010). Quantifying Environmental Impacts and Eco-costs from Brick Waste. *Architectural Engineering and Design Management*, *6*(3), 189–206. https://doi.org/10.3763/aedm.2009.0106

Yang, J., & Ogunkah, I. C. B. (2013). *A Multi-Criteria Decision Support System for the Selection of Low-Cost Green Building Materials and Components*. *2013*(December), 89–130.

Yıldız-Geyhan, E., Altun-Çiftçioğlu, G. A., & Kadırgan, M. A. N. (2017). Social life cycle assessment of different packaging waste collection system. *Resources, Conservation and Recycling*, *124*(February 2016), 1–12. https://doi.org/10.1016/j.resconrec.2017.04.003

Yüksek, Í. (2015). The evaluation of building materials in terms of energy efficiency. *Periodica Polytechnica Civil Engineering*, *59*(1), 45–58. https://doi.org/10.3311/PPci.7050

Zahedi, F. (1986). The analytic hierarchy process—a survey of the method and its applications. *Interfaces*, *16*(4), 96–108.

Zavadskas, E. K., Turskis, Z., & Tamosaitiene, J. (2011). Selection of construction enterprises management strategy based on the SWOT and multi-criteria analysis. *Archives of Civil and Mechanical Engineering*, *11*(4), 1063–1082. https://doi.org/10.1016/S1644-9665(12)60096-X