

Table A4 Theme 4: Comparative Analysis of Global NSATs to Local context

| <i>Paper</i>                         | <i>(Cheshmehzangi et al., 2020)</i>  | <i>(Dang et al., 2020)</i>  | <i>(Shwe, Iki, &amp; Homma, 2018)</i>   | <i>(Blanco, 2016)</i>   | <i>(Arslan, Durak, &amp; Aytac, 2016)</i>  |
|--------------------------------------|--|---|---|---|--|
| <i>Geographic context</i>            | Asia   | Asia  | Asia  | South America   | Asia, Turkey   |
| <i>Scope</i>                         | Asian scope of NSATS   | Chinese tool with potential for developing similar tools in developing countries  | Local case studies in Myanmar   | Local scope to develop the tool in Chile  | Local case study in Bursa  |
| <i>NSATs used</i>                    | 8 NSATs all used in Asia 1 Global  | 3 tools, 1 local ASGE and 2 global LEED ND, and LEED cities.  | 3 Global NSATs LEED ND, BREEAM communities, CASBEE UD   | 3 NSATs 2 international; LEED ND, BREEAM communities, and local tool in Chile (I love my neighborhood)                                | 7 NSATs, including LEED-ND, BREEAM communities, CASBEE UD  |
| <i>Number of comparative studies</i> | 4 comparative studies scoping down   | Comparative analysis on 4 standards between local tool and 2 global LEED tools  | 3 comparative studies first between tools, second to evaluate compliance degree to the 5 core indicator characteristics, third comparing results of each tool to case studies and recognizing shortcomings, | 2 comparative analyses; one on building rating system scope, the other on neighborhood level scope all between the 3 tools mentioned. | 5 comparative studies, First between 7 tools, second narrowed down to 3 global tools, third to weigh strength and weaknesses between LEED, BREEAM according to case study suitability, fourth mutual relations between SDGs and LEED ND, and fifth assessment according to credits into strength & weaknesses. |
| <i>Output</i>                        | developed the pathway for development of NSAT in Chinese city (and other Asian cities) | The study highlights the strengths and weaknesses in the current local assessment tool with regards to its global counterpart | The paper developed a methodology to recognize common strengths and weaknesses in any given case study using a cross examination by global assessment tools   | Highlights the limitations and shortcomings of the current local tool.  | assessment according to LEED-ND credits into strength & weaknesses in the form of a binary system.   |