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1 **China's energy consumption in the building sector: A *Statistical***

2 ***Yearbook-Energy Balance Sheet* based splitting method**

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9 **Abstract:** China's energy consumption in the building sector (BEC) is not counted as
10 a separate type of energy consumption, but divided and mixed in other sectors in
11 China's statistical system. This led to the lack of historical data on China's BEC.
12 Moreover, previous researches' shortages such as unsystematic research on BEC,
13 various estimation methods with complex calculation process, and difficulties in data
14 acquisition resulted in "heterogeneous" of current BEC in China. Aiming to these
15 deficiencies, this study proposes a set of China building energy consumption
16 calculation method (CBECM) by splitting out the building related energy
17 consumption mixed in other sectors in the composition of *China Statistical*
18 *Yearbook-Energy Balance Sheet*. Then, China's BEC from 2000–2014 are estimated
19 using CBECM and compared with other studies. Results show that, from 2000–2014,
20 China's BEC increased 1.7 times, rising from 301 to 814 million tons of standard coal
21 consumed, with the BEC percentage of total energy consumption stayed relatively
22 stable between 17.7%–20.3%. By comparison, we find that our results are reliable and
23 the CBECM has the following advantages over other methods: data source is
24 authoritative, calculation process is concise, and it is easy to obtain time series data on
25 BEC etc. The CBECM is particularly suitable for the provincial government to
26 calculate the local BEC, even in the circumstance with statistical yearbook available

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