

The average material quantity slightly varied among the different house categories in Jakarta/Bandung: 2.26/1.88, 2.06/2.23 and 2.05/2.26 ton/m² for simple, medium and luxurious houses, respectively. On average, the stone accounted for the largest percentage for all houses (32%/31%), followed by sand (31%/30%), clay brick (19%/19%), cement (8%/8%), etc.

- If both reuse and recycling rates are assumed to be zero, then the total demolition waste of unplanned simple houses in Jakarta was found to be 41.5 million ton/m² until 2020 and the corresponding waste in Bandung is predicted to be lower (12.6 million ton/m²). All of them go to the landfills. Moreover, the transformation of these simple houses to the larger medium houses by 2020 would cause further urban expansion in both of the cities: at least, the additional area of 20.0 km² is required for the new construction in Jakarta, while the area of 5.7 km² is required in Bandung.
- A scenario analysis was conducted for Jakarta to assess the effects of policy of promoting reused and recycled material use. The two scenarios with the zero and maximum reuse/recycling rates were compared in the analysis. The results showed that maximizing reuse/recycling rates would decrease the average material waste dramatically by 37% to 41%. The promotion of reuse/recycling were proved to reduce embodied energy/CO₂ emissions of building materials effectively (27% to 28%).
- The lack of policies for promoting 3Rs (reduce, reuse and recycling) specifically target C&D waste (Indonesia, 2008) at the national level is considered one of the crucial problems in Indonesia.
- The increase in larger landed houses would directly result in the rapid horizontal expansions of the cities, thus accelerates urban sprawls. Provision of mid-to-high-rise apartments to the growing middle class in the cities would be one of the effective housing policies for already crowded Indonesian cities.

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