

**Support information**

**Low-surface energy carbon allotrope: the case for bcc-C<sub>6</sub>**

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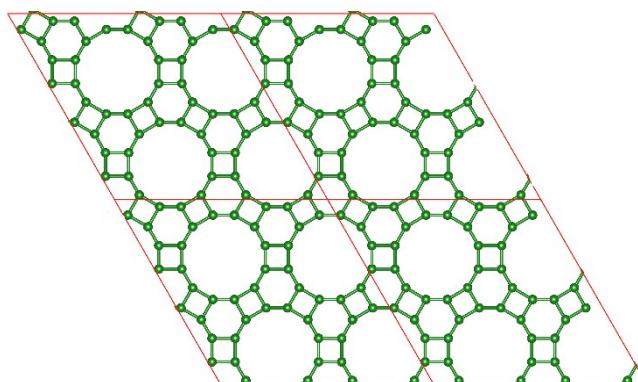


Figure S1. The relaxed two layered (2×2×1) supercell in (111) orientation. After optimization, the buckled initial structure becomes the plane sheet.