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Supplementary Data

2 Figure S1. (a) IKA Bomb Calorimeter, (b) Pelletizer for solid samples, (c) Pellets of solid samples, and (d)
3 Capsule Aid for liquid samples

4 Table S1. Hydraulic Force required to pelletize relevant solids and liquids and their calorimetry

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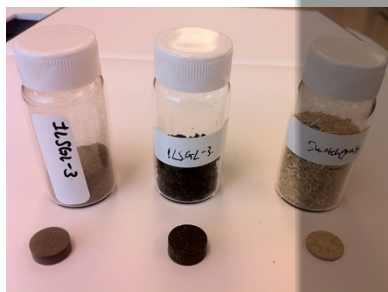
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(a)



(b)



(c)



(d)

Figure S1. (a) IKA Bomb Calorimeter, (b) Pelletizer for solid samples, (c) Pellets of solid samples, (d) Capsule Aid for liquid samples

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18 Table S1. Hydraulic Force required to pelletize solid and encapsulation of liquid samples along with
19 heating values

| Samples | Form of material | Hydraulic Force* for sample preparation, MPa | Mass Density of pellets, (kg/m ³) | Mean High Heating Value, (MJ/kg) | Coefficient of variation, (%) |
|---------------------------|-----------------------------------|---|--|--|-------------------------------------|
| Eucalyptus | Solid as Chips | 16.0 | 279.2 | 18.6 | 0.17 |
| Pretreated Eucalyptus | Solid as Particles | 13.0 | 304.8 | 18.9 | 0.65 |
| Glucose | Solid as Powder | 10.0 | 336.2 | 15.5 | 0.09 |
| Ethanol | Liquid that is Evaporative | Encapsulated in Polyethylene | n.a. | 29.2 | 1.33 |
| [C ₂ mim][OAc] | Liquid that is non-evaporative | Encapsulated in Polyethylene | n.a. | 23.1 | 0.50 |

20 *Note: Pelleting force is the observed gauge value