Supplementary Information

Highly Efficient Synthesis of Cyclic Ureas from CO2 and Diamines by Pure CeO2 Catalyst Using 2-Propanol Solvent

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Fig. S1 Leaching test of the direct synthesis of 1 from CO2 and ethylenediamine. Without removal of CeO2 (○) and with removal of CeO2 (●), an arrow indicates the removal of CeO2 by filtration. Reaction conditions: ethylenediamine (10 mmol), methanol (6.4 g), CeO2 (0.085 g), $P_{CO2} = 0.5$ MPa, $T = 433$ K.
Fig. S2 XRD of (a) fresh CeO$_2$ and (b) CeO$_2$ used once.

Fig. S3 TG-DTA profile of (a) fresh CeO$_2$ and (b) CeO$_2$ used once.
Fig. S4 FTIR spectrum of CO$_2$ adspecies on CeO$_2$ at 303 K.

Fig. S5 FTIR spectrum of adspecies of 1 on CeO$_2$ at 423 K.