Imidazole tailored deep eutectic solvents for CO$_2$
capture enhanced by hydrogen bond

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Fig. S1 DSC trace of pure MEA.

Fig. S2 DSC trace of pure BMIMCl.
Fig. S3 DSC trace of MEA:ILs(1:1).

Fig. S4 DSC trace of MEA:ILs(2:1).

Fig. S5 DSC trace of MEA:ILs(4:1).
**Fig. S6** CO$_2$ uptake as a function of bubbling time at room temperature.

**Fig. S7** ATR-IR spectra of MEA:ILs(2:1) before and after CO$_2$ absorption.

**Fig. S8** ATR-IR spectra of MEA:ILs(4:1) before and after CO$_2$ absorption.
**Fig. S9** $^1$H NMR spectra of MEA:ILs(2:1) before and after CO$_2$ absorption.

**Fig. S10** $^1$H NMR spectra of MEA:ILs(4:1) before and after CO$_2$ absorption.
Fig. S11 $^{13}$C NMR spectra of MEA:ILs(1:1) before and after CO$_2$ absorption.

Fig. S12 $^{13}$C NMR spectra of MEA:ILs(2:1) before and after CO$_2$ absorption.
**Fig. S13** $^{13}$C NMR spectra of MEA:ILs(4:1) before and after CO$_2$ absorption.

**Fig. S14** Experimental setup of calorimeter BT 2.15.
Fig. S15 Heat of absorption of CO$_2$ in aqueous solution of MEA, MDEA and PZ.