Table s2. Three reaction parameters (i.e., base, temperature, solvent) were optimized toward high conversion and low climate impact for the synthesis of Monomer 1. The parameters and the results were color coded to illustrate sustainability, with green being the most sustainable, yellow the intermediately sustainable, and red the least sustainable.

	Parameters			Results	
Reaction	**Base[a]**	**Temperature[b] (°C)**	**Solvent[c]**	**Conversion[d] (%)**	**Climate Impact[e] (kg CO_2 eq. / kg monomer)**
A*	K_2CO_3	82	ACN	**88**	12.4
B	K_2CO_3	56	Acetone	**82**	13.9
C	K_2CO_3	20	DMSO	50	22.3
D	K_2CO_3	20	Acetone	0	-
E	NaOH	82	ACN	**95**	**9.38**
F	NaOH	82	DMSO	**85**	**10.4**
G	NaOH	82	*t*-BuOH	58	15.1
H	NaOH	56	DMSO	**99**	**8.88**
I	NaOH	56	ACN	34	25.2
J	NaOH	56	*t*-BuOH	0	-
K	NaOH	20	DMSO	43	19.1
L	NaOH	30	*t*-BuOH	0	-
M	NaOH	20	Acetone	0	-

* The initial non-optimized reaction conditions for synthesis of monomer 1. [a] Color-coded according to the GHG emissions of the production of the two bases. [b] Higher reaction temperatures were generally less favorable due to energy consumption. [c] Color-coded according to the CHEM21 solvent guide. [d] The conversion after 24 h according to 1H NMR spectroscopy. High conversions (above 80%) were color-coded green, medium to low conversions (34-58%) were yellow, and non-conversion was red. [e] Climate impacts lower than the non-optimized reaction A* (i.e., < 12.4 kg CO2 eq./kg) were color-coded green, higher climate impacts (i.e., 12.4-25.2 kg CO2 eq./kg) were color-coded yellow, and climate impacts which could not be calculated (due to the low conversion) were color-coded red.