**Supporting Information** 

## Base Initiated Depolymerization of Polycarbonates to Epoxide and Carbon Dioxide Co-Monomers – A Computational Study

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Table of Contents:	Page
Figure S 1. <sup>1</sup> H NMR spectra of propylene and styrene polycarbonates	. S1
Table S 1. Calculated C-O distances and O-C-O angles at the alkoxides' transition s	tates for
epoxide formation	S2



**Figure S 1.** <sup>1</sup>H NMR spectra of propylene (blue, left) and styrene (blue, right) polycarbonates after they had been treated with sodium bis(trimethylsilyl)amide and heated at 110 °C for 16 hours. The CH resonances at 2 to 5 ppm are of note. No trace of propylene (red, left) and styrene (red, right) oxides was found.

Parent	Methyl carbonate	Alkoxide	<b>O-C-O</b>
carbonate	C-O (Å)	C-O (Å)	(°)
EC	1.962	1.958	157.0
PC-1	2.023	2.013	149.3
PC-2	1.951	1.967	156.0
CIPC-1	1.989	1.993	152.3
CIPC-2	1.966	1.947	156.7
SC-1	2.003	2.038	148.1
SC-2	1.967	1.930	157.5
СНС	2.006	2.009	148.7
CPC	1.993	2.03	149.8
TMC	1.904	2.064	175.2

**Table S 1.** Calculated C-O distances and O-C-O angles at the alkoxides' transition states for epoxide formation.