SUPPLEMENTARY MATERIAL FOR:

Searching for Green Solvents

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Synthesis trees for the chemicals listed in Figure 8 are shown in the figures below. Chemicals obtained by mining, or by the separation of the components of air, biomass, fossil fuels, waste, or natural waters are placed in boxes. Information about the predominant route in US production of each chemical was obtained from the Kirk-Othmer Encyclopedia of Chemical Technology. Where US data was unavailable, the predominant route worldwide was used.«, 2001 #5629» For compounds such as HCl that are primarily made as byproducts, the major industrial synthesis that produces the compound as the intended product is shown. No synthesis trees are shown for hexane and CO_2 because they are obtained by separation without any synthetic steps. The synthesis tree for 3-butyl-1-methylimidazolium tetrafluoroborate is shown in Figure 7 of the article.

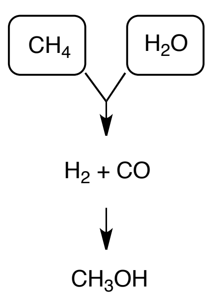

Figure S1. The synthesis tree for methanol.

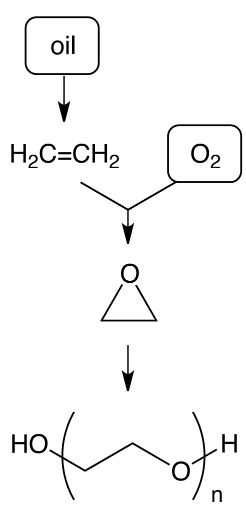

Figure S2. The synthesis tree for poly(ethylene glycol).

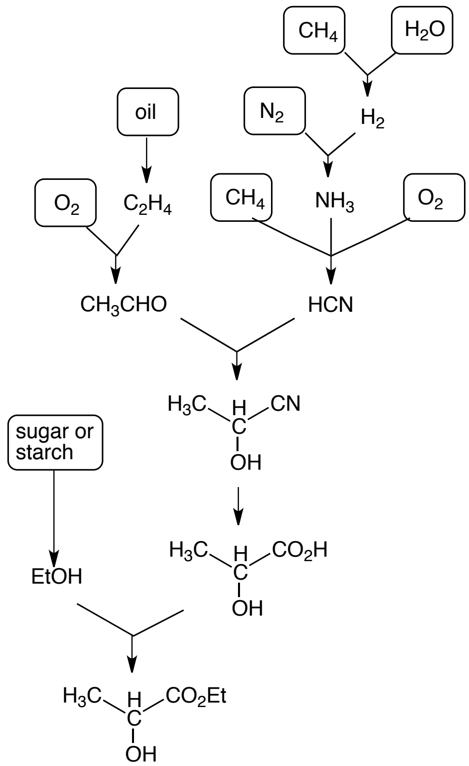

Figure S3. The synthesis tree for ethyl lactate.

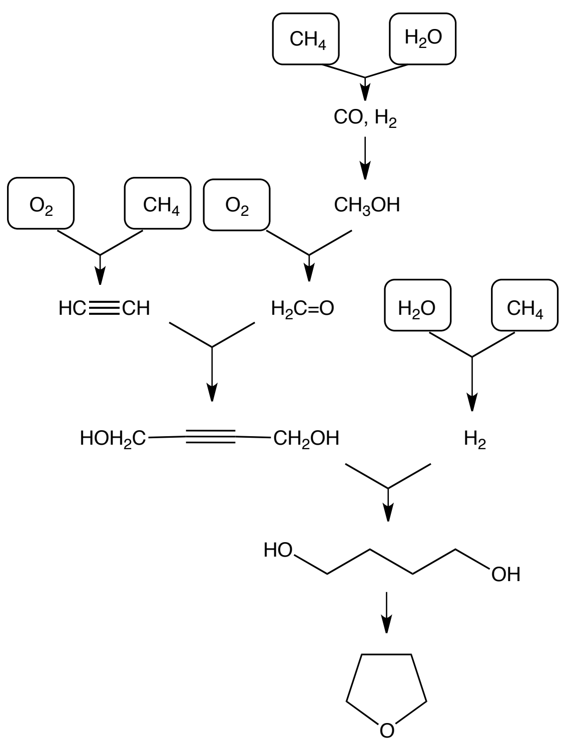

Figure S4. The synthesis tree for tetrahydrofuran.

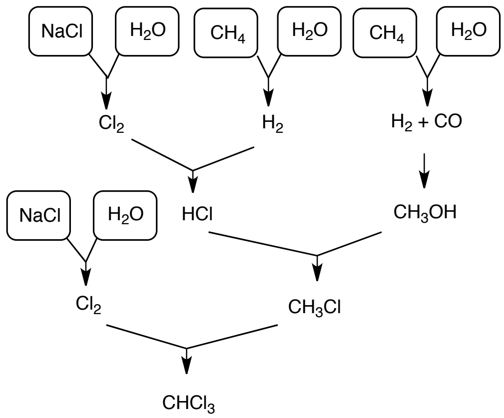

Figure S5. The synthesis tree for chloroform.

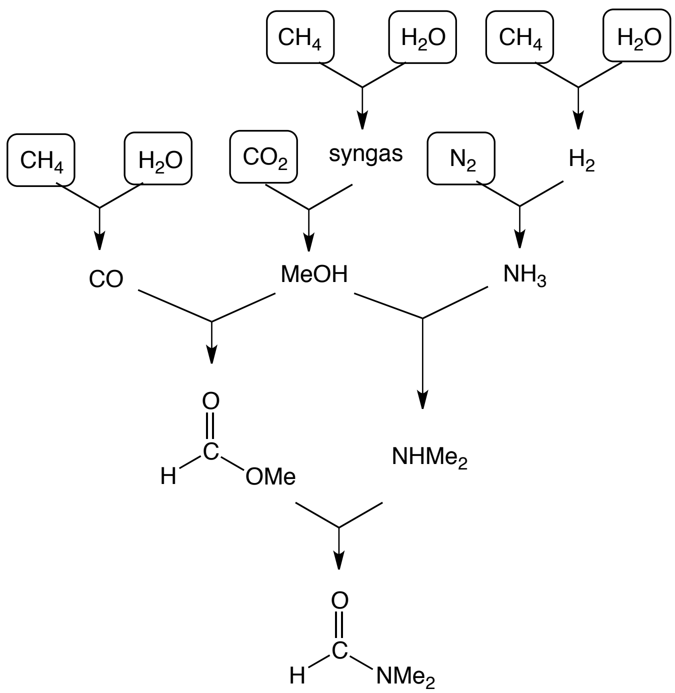

Figure S6. The synthesis tree for dimethylformamide.

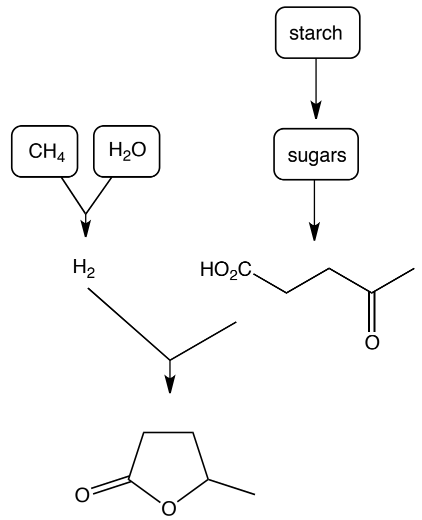

Figure S7. The synthesis tree for γ-valerolactone. Because it is not made on an industrial scale, this Figure shows the shortest route by which it could be made industrially.

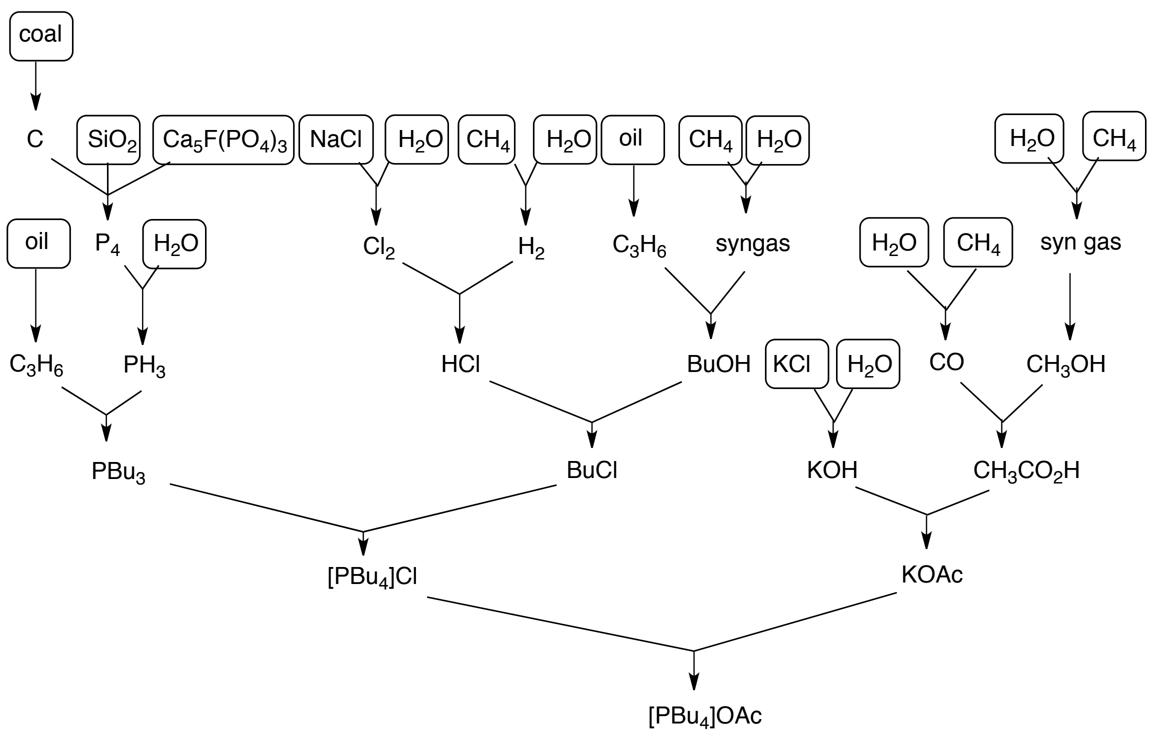

Figure S8. The synthesis tree for tetrabutylphosphonium acetate.

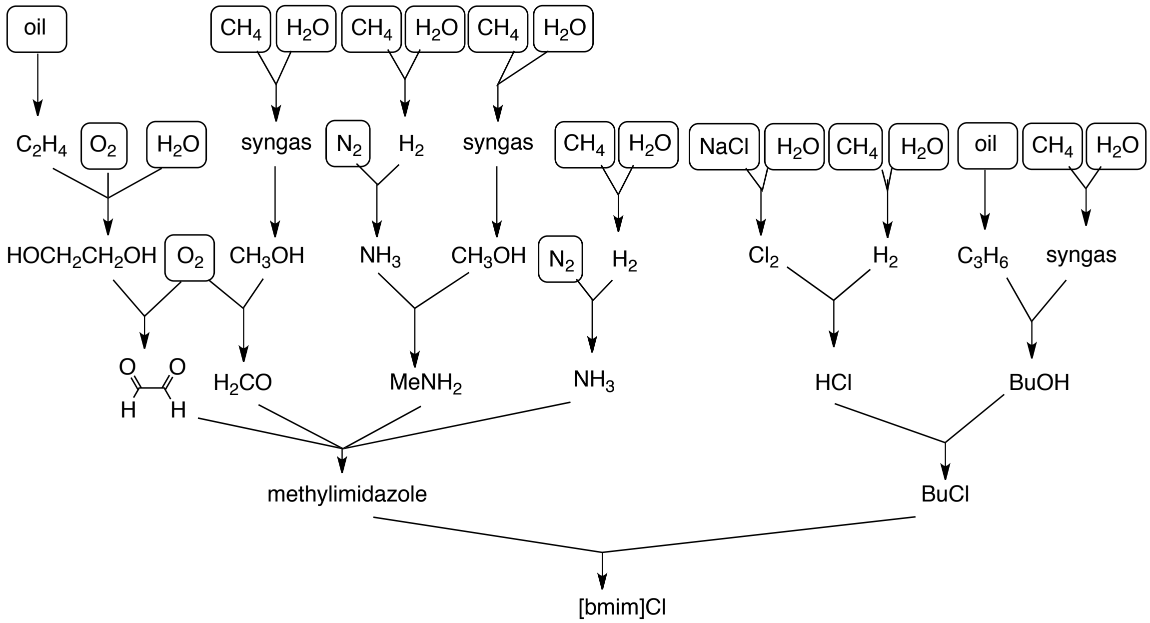

Figure S9. The synthesis tree for 3-butyl-1-methylimidazolium chloride.

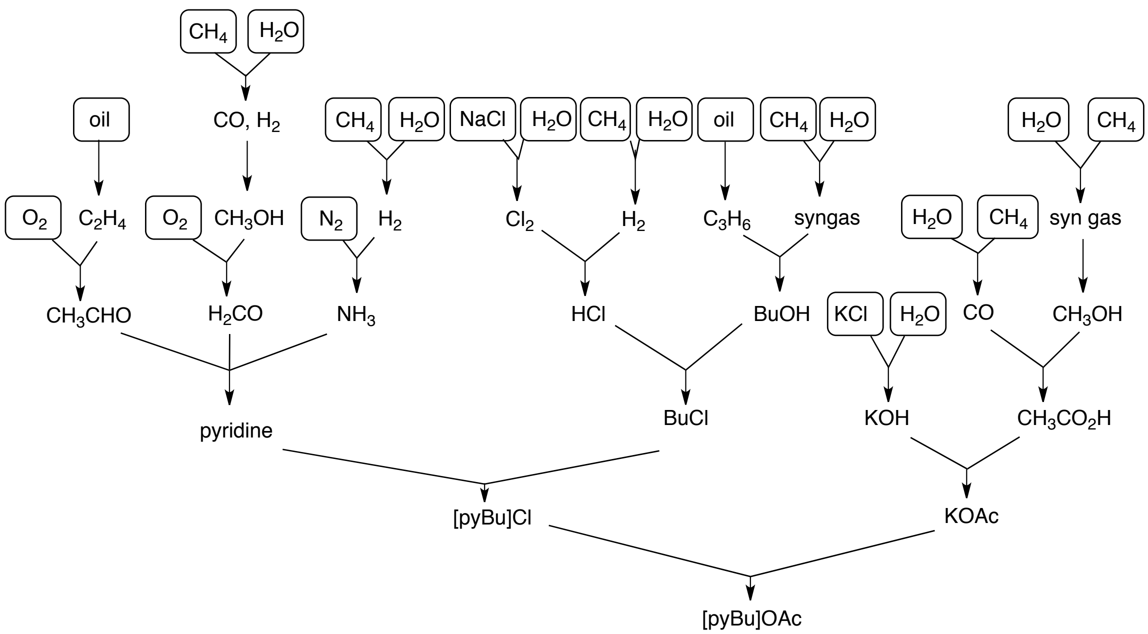

Figure S10. The synthesis tree for N-butylpyridinium acetate.

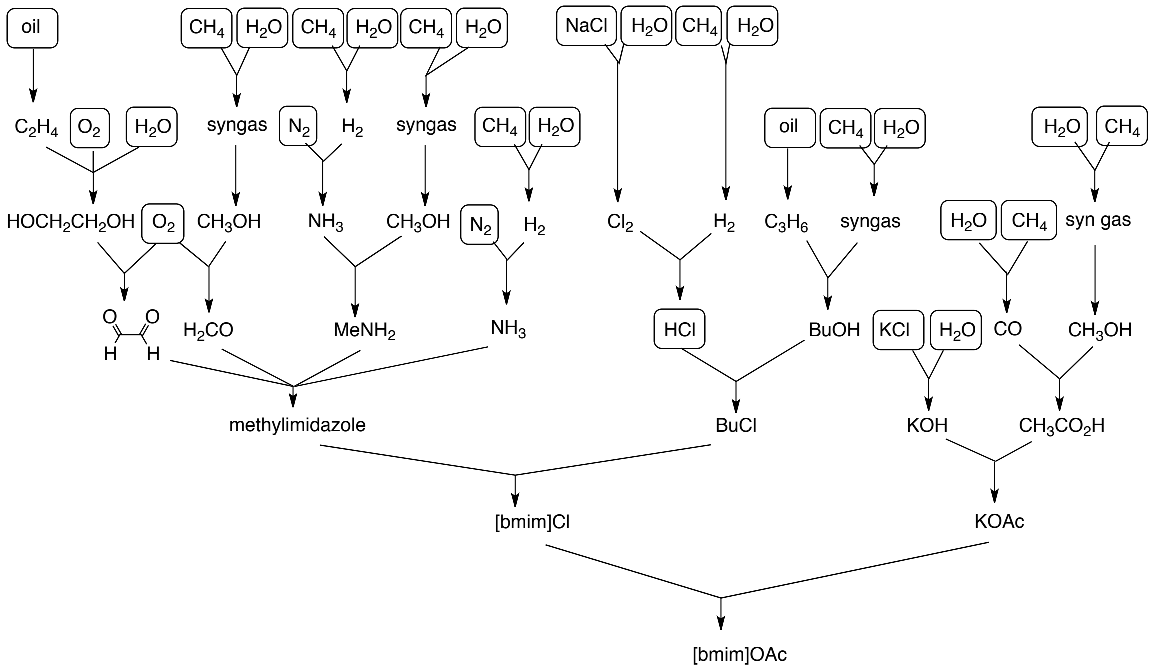

Figure S11. The synthesis tree for 3-butyl-1-methylimidazolium acetate.

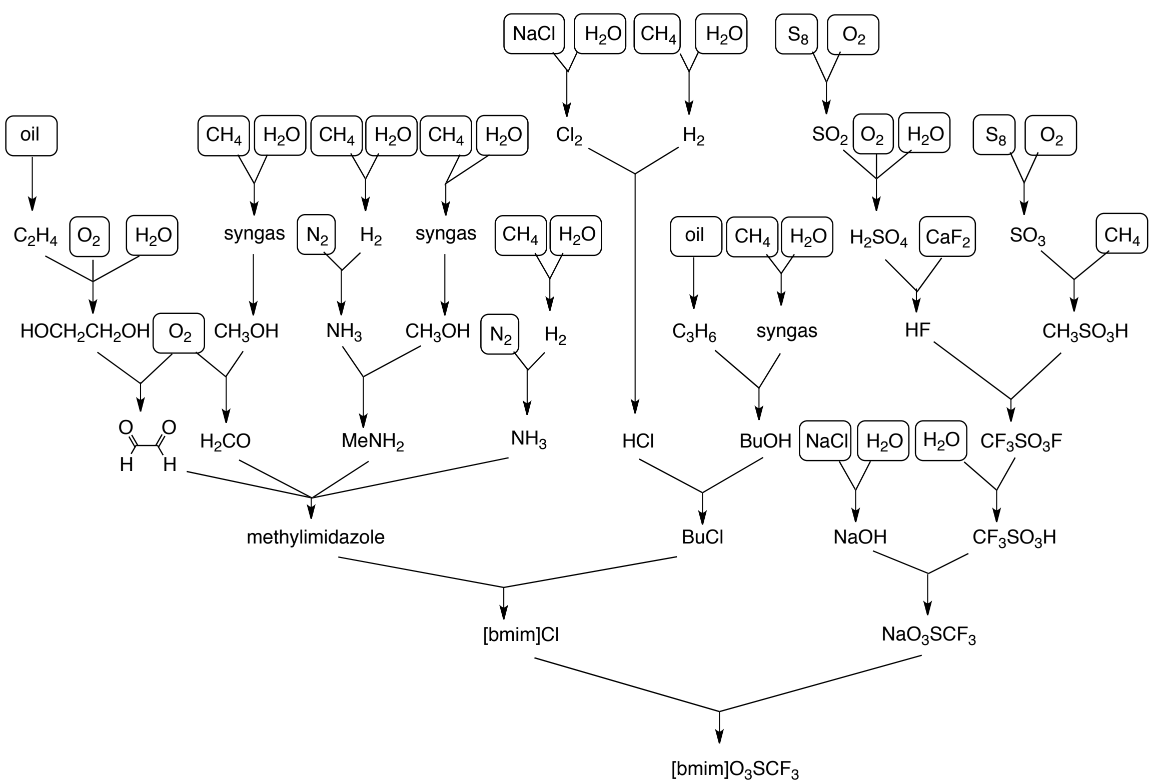

Figure S12. The synthesis tree for 3-butyl-1-methylimidazolium trifluoromethylsulfonate.

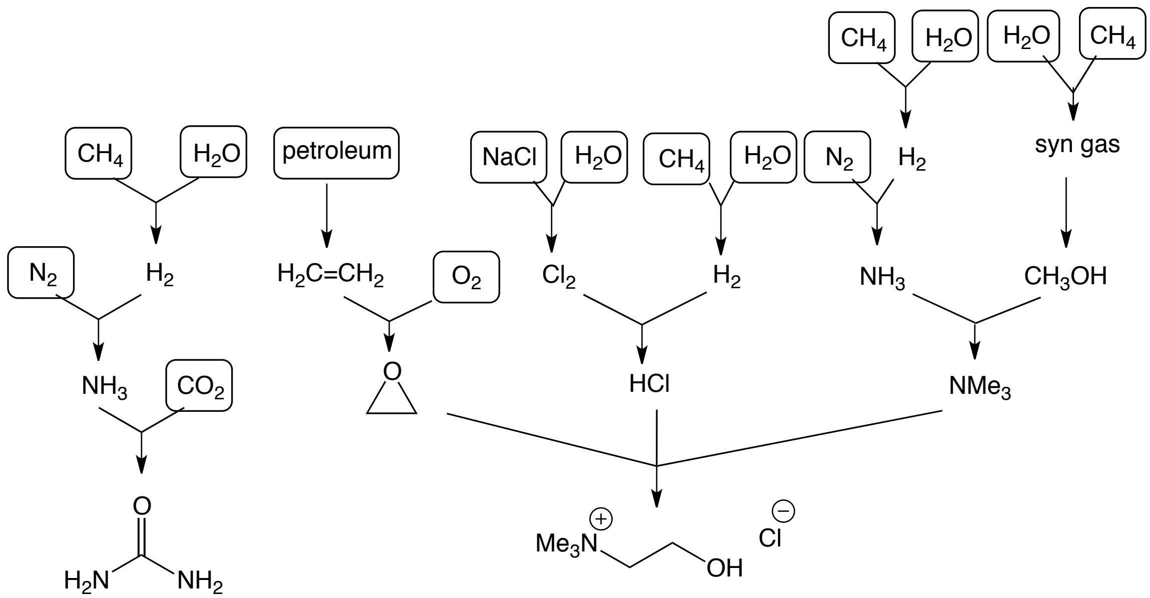

Figure S13. The synthesis tree for choline chloride/urea mix.