

- Add Photovoltaic Array Somewhere Nearby
- Add Return Loop Heat Exchanger between the hot and cold loops – Reduces Energy needs for system
- Take advantage of the heat pump Coefficient of Performance (COP) that can often be ~4X
- Energy is provided to BOTH loops \rightarrow another 2X!

RUTGERS

Dunbar P. Birnie, III

Figure adapted from: J. A. de Chalendar, P. W. Glynn and S. M. Benson, Energy Environ. Sci., 2019, 12, 1695 www.MSE.Rutgers.edu