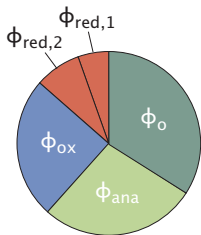
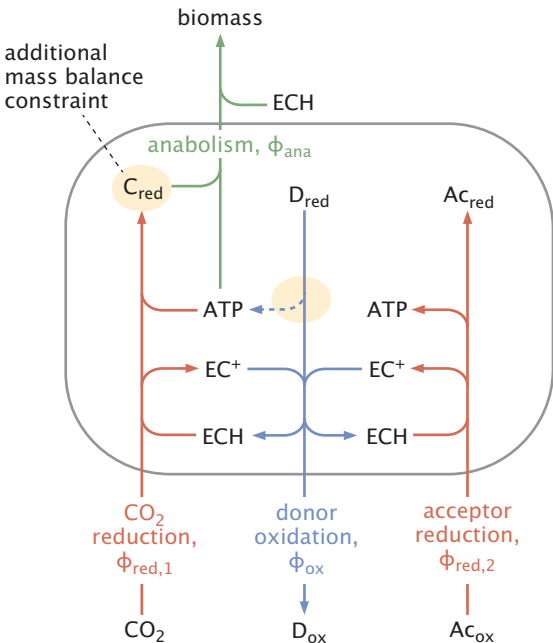


a model of chemolithoautotrophy



donor oxidation may not make ATP