Accessory dwelling units (ADUs) are surging in popularity as cities push for their construction to aid in combatting the housing crisis. In Seattle, recent survey data calls for increased focus on sustainability and cost. Lowering energy use intensity (EUI) of ADUs allows for the targeting of both desires which homeowners hold. The effect of varying window-to-wall ratios (WWRs) on EUI is simulated using EnergyPlus and Honeybee. Galapagos, a genetic solver plugin for Grasshopper is used to vary window-to-wall ratio and optimize ADU energy use intensity on three single family residential lots in Seattle, Washington. Site context is constructed using OpenStreetMap GIS data and zoning restrictions are incorporated into the Grasshopper definition. Future work is planned to utilize output data from this tool as the training dataset for a machine learning model. Accurate machine learning prediction of energy use intensity instead of extended simulation would increase pragmatic use of such tools.