GPUs allow explicit control of cache and take a Single Instruction Multiple Data approach to hiding latency inherent in algorithms. The Path Integral Monte Carlo algorithm is adapted to utilize GPUs via OpenCL as a hybrid implementation, allowing for the simulation of materials with long range interactions on consumer level hardware. Perturbations of state (moves) are retained by the CPU while the change in potential is evaluated by the GPU. Several move types are then implemented on the GPU in an attempt to further improve scaling. Well known potentials, such as the simple harmonic oscillator, are used to validate the implementation. GPU-specific methods of perturbing the state are explored. Performance of the algorithm is compared to that of a traditional, CPU only approach, at all stages of development.