Two thermalized states, separated by a partition

$E_1 = 80\,\Delta$

$E_2 = 20\,\Delta$
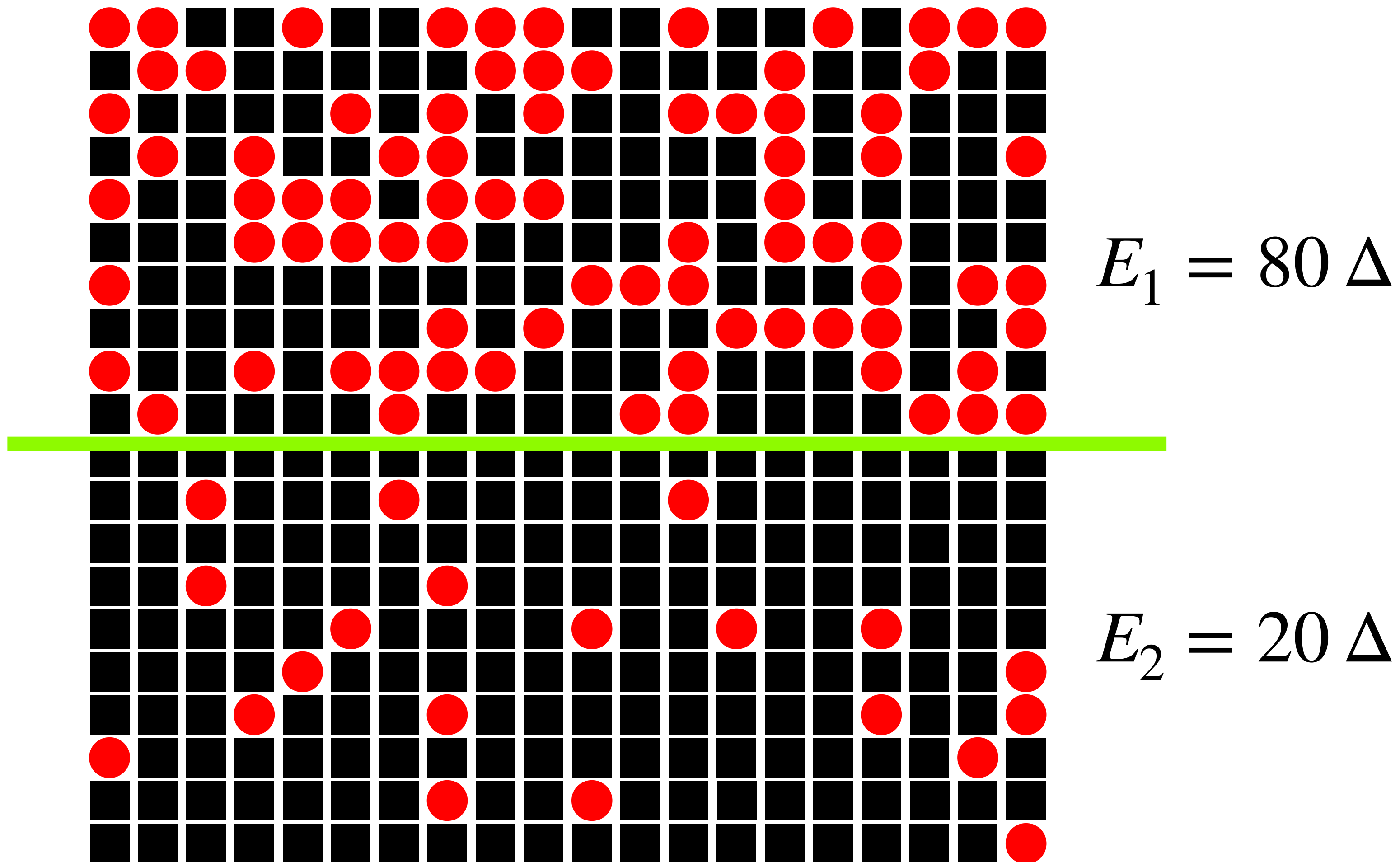
The macro state is
$$(E_1, E_2) = (80, 20)$$

When the partition is removed the system hops exploring configurations with different partitions of energy.

When the partition is removed the system thermalizes
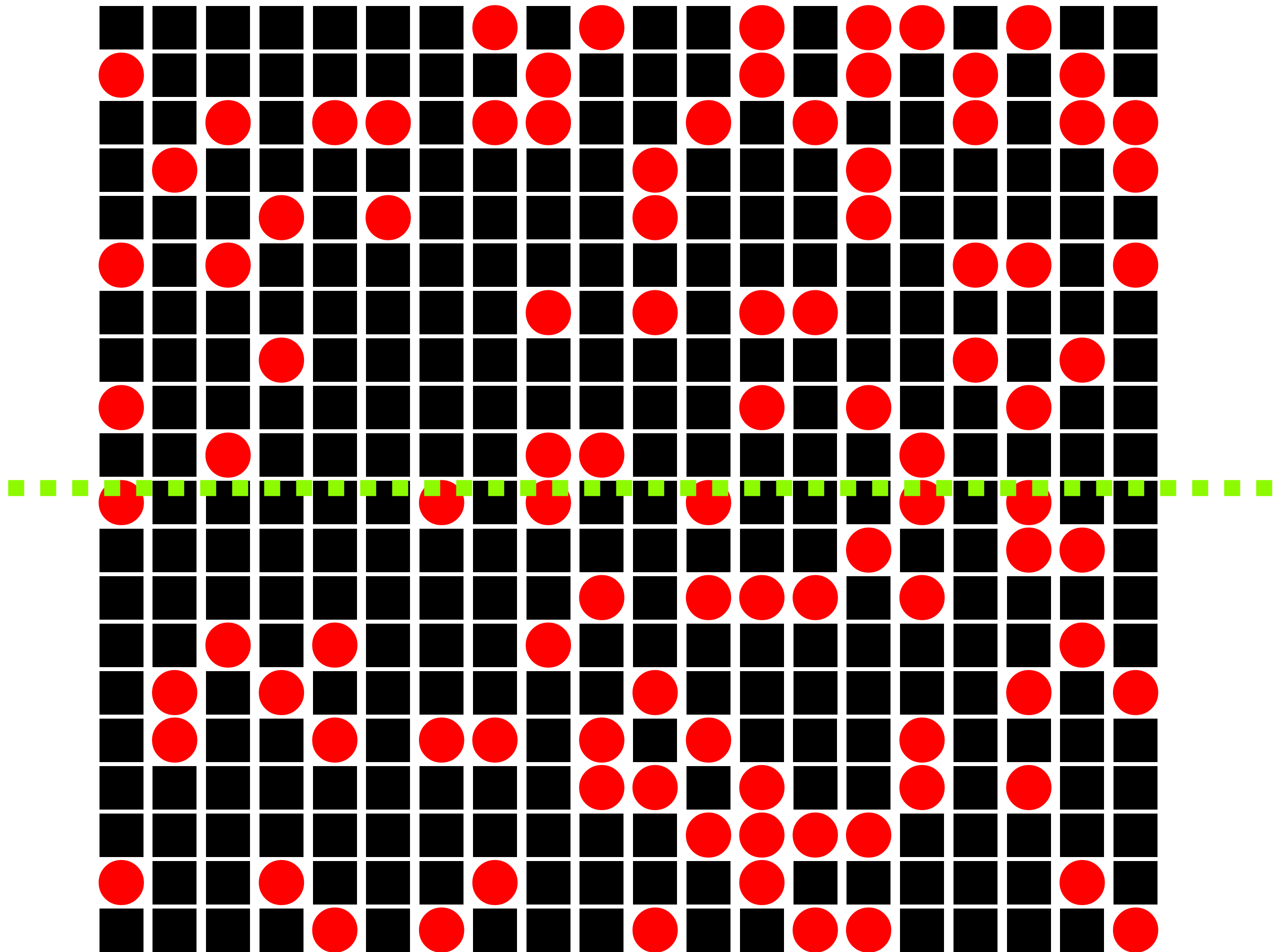
When the partition is removed the system hops exploring all configurations. This is a significantly larger number than those with

$$E_1 = 80\,\Delta$$