Given a surface $M$, the complexity of a branched cover $M \to S^2$ of degree $d$ and with branching set of cardinality $n \geq 3$ is defined as $d$ times the hyperbolic area of the complement of its branching set in $S^2$. The simple $S^2$-branched cover area of a surface $M$ is the infimum of all complexities of simple branched covers $M \to S^2$. This is an invariant of the surface $M$ that tells us how efficiently $M$ covers the 2-sphere. We prove that if $M$ is a connected closed orientable surface of genus $g \geq 1$, then its simple $S^2$-branched cover area equals $8\pi g$. (Received August 19, 2011)