Bicyclic 4-polytopes were introduced by Z. Smilansky in 1990, and they are the convex hulls of a finitely many evenly spaced points on the generalized trigonometric moment curve in real 4-space. In his introduction of these polytopes, Smilansky conjectured that the number of combinatorial types, with \( n \) vertices, is at least \( \lceil n/4 \rceil \), with equality if \( n \) is a prime. In this joint work with J. Lawrence, we examine this problem in the context of classifying all cyclically generated 4-polytopes. (Received February 22, 2007)