Fabrice Baudoin\*, 150 N. University Street, West Lafayette, IN 47906. Bakry meets Villani. We study gradient bounds for solutions of degenerate Fokker-Planck equations, including as a special case, the celebrated kinetic Fokker-Planck equation. Our method generalizes to hypoelliptic operators the Bakry's approach and allows to recover and strengthen hypocoercive estimates obtained by Villani. (Received August 13, 2013)