Hybrid drift-kinetic pressure coupling scheme from a variational principle. ALEXANDER CLOSE, CESARE TRONCI, University of Surrey — A hybrid-kinetic pressure coupling scheme (PCS) model is presented in the low-gyrofrequency approximation. This fully energy-conserving model is derived from variations of a Lagrangian over a semidirect product manifold, and produces important terms in the Vlasov equation that correct models previously appearing in the literature.