Curvature, torsion and temperature in energy transfer YASSER OMAR, ISEG, Technical University of Lisbon & Instituto de Telecomunicacoes — Curvature and torsion can play a role in energy transfer in alpha-helical proteins [New J. Phys. 12, 055003 (2010)]. The phenomenon is specific to alpha-helices and not to beta-sheets in proteins due to the three strands of hydrogen bonds constituting the alpha-helical backbone. In this work we analyse and discuss how temperature can affect the role of geometry in the energy transfer.