

The huge amount of solar energy available on Earth's surface has heightened awareness in Concentrating Solar Power, and more particularly in hybrid concepts. The integrated solar combined cycle system (ISCCS) is one of the more promising hybrid configurations for converting solar energy into electricity and it might become the technology of choice in the near future. This article reviews the R&D activities and published studies since the introduction of such a concept in the 1990s. The review includes the current status and describes different hybridizations of solar energy with natural gas, coal and other renewable energy sources. Furthermore, it provides in-depth analysis of real and expected R&D findings