Compressed air was and is still used in many applications like pneumatic control systems, pneumatic hammers and other tools, diving, brakes, weapons, locomotives in tunnels or mines and already 1840 in a car presented in Paris. All these applications have compressed air storages. A CAES Power Plant consists mainly of an electric motor driven compressor, a compressed air storage (e.g. a cavern), an expansion engine that drives a generator, connecting pipes and control systems. But there are many different types and combinations of different machines and cycles possible, e.g. pressure vessels with constant volume or constant pressure (e.g. like a gasometer) or with or without heat storage or different types of compressors and expanders like turbo machines or piston engines. Some basic principles will be presented and an overview about the main proposals and realized plants will be given. Especially the advantages of the ISACOAST-CC Isobaric Adiabatic Compressed Air Storage - Combined Cycle will be shown as it comprises a CAES Power Plant as well as it can be used as conventional Gas- and Steam-Turbine - Combined Cycle Power Plant, which can be operated and produce electricity also, when the CAS is empty, and can therefore be used as its own back up plant.