## Information management of coastal area guided by metadata system

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In order to reduce the atmospheric warming material to solve global environmental problems, the reduction of carbon dioxide is inevitable as well as the energy saving and higher efficiency. Geological storage of carbon dioxide in appropriate formations can be the final solution to realize the low emmisive warming materials in conjunction with the large scale emissive sources. Thermal coal power generators was a classic style electricity to emit huge amount of carbon dioxide to atmosphere. If the coal power generator is operated with the geological storage of carbondioxide, the change will come with less emissive and effective method of effective application of earth resources. The key might be coastal areas that involve large scale emmissive sources, where the large population exists and potentially highe risk area by socail damage. The risk management and the sustainable development in coastal areas require both of the utilization of past and newly obtained information to provide the advanced information management. Although the present search sysytem is tending to use the constantly sustainable information or to delete the overlapped data, the proposed search system guided by metadata system should manage various historic and improved data sets sometimes overlapped frequently. The industry that utilize geological formations accepts such new type information management guided by metadata system that requires the attributes of data entities including the history, the location of preservation, the method of accessing and using, and so on. Unlike the data entities or simplified key tables, well organized and standardized metadata sysytem that guides search systems will help to set up the necessary information management sysytem to utilze the complex changing data with various sources. Reduction of carbon dioxide using the underground geological structure in coastal area requires the advanced information management guided by metadata system.