

46ESS-80: Carbon capture and storage(CCS)

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The topic can be divided into three categories: 1. The situation we met in reality and the reason why we need to find solutions for CO₂. 2. The three main processes of CCS. 3. The challenges we have when we apply CCS for the industry production. In the first category the relationship between CO₂ content in the atmosphere and global warming will be illustrated. It will be described from the mechanism of natural carbon capture and storage, the effect of human activities to nature process and the emergency of taking action to reduce carbon content in the atmosphere. Furthermore, CCS will be introduced in the second category. It may cover carbon capture, carbon transportation and carbon storage, each of which will be explained in details such as methods and mechanism, performance, comparisons, future development, etc. Last but not least, a discussion about the pros and cons of this technology will be prompted which may cover the danger of carbon leakage, economies and cost, morality problems and collaboration among counties.