

Transitions of energy utilization based on future technology transitions

China is the largest energy consumer and CO₂ emitter in the world. Facing the challenge of environment pollution and CO₂ mitigation, the Chinese government has developed an energy transition strategy towards the year 2030. The transition of energy utilization relies on many emerging technologies, such as IT technology, waste heat reuse, nature-based-building design, distributed energy system, electric vehicles, etc. These technologies will help China to reduce local pollution and CO₂ emissions in the long run. With energy technology transitions in the industrial sector, building sector, transportation sector and power sector, the current energy utilization mode will be totally changed in the future.