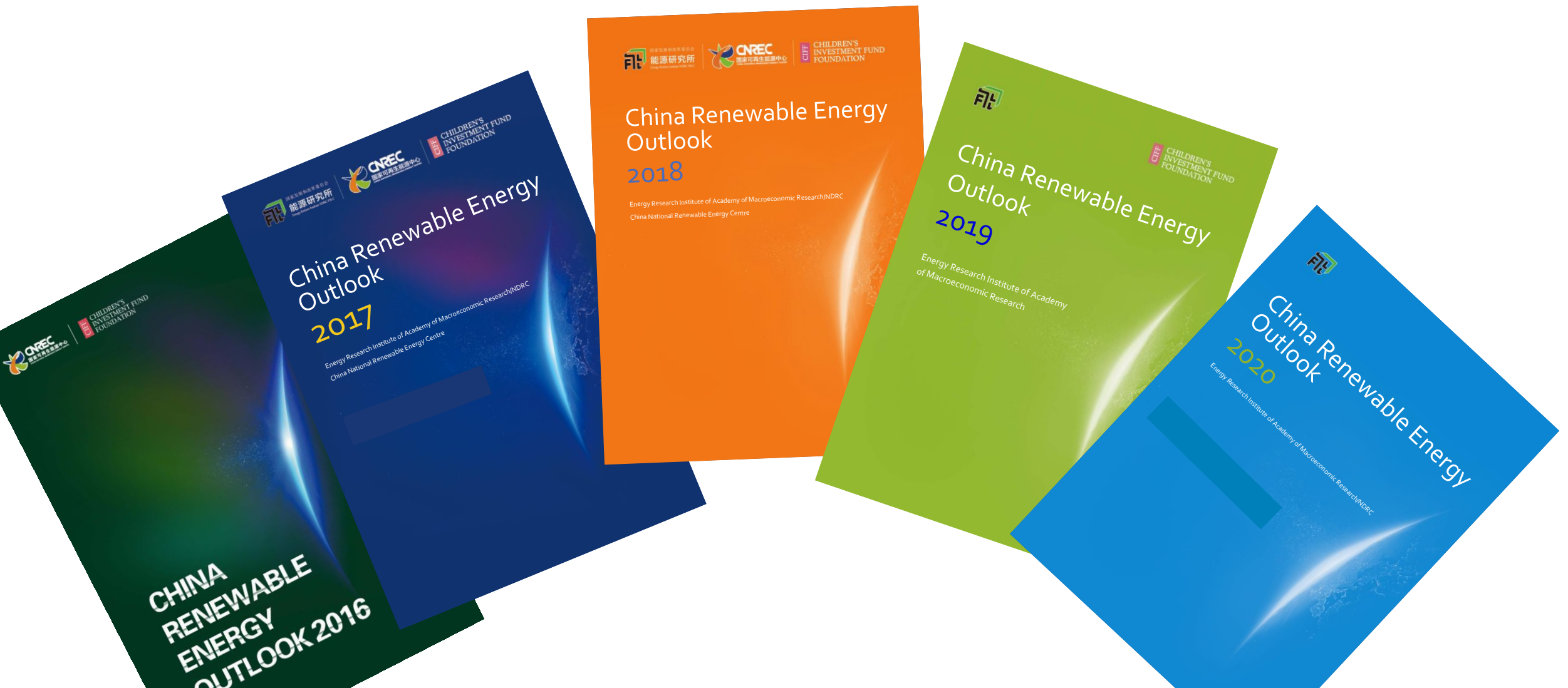



“We aim to have CO₂ emissions peak before 2030 and achieve carbon neutrality before 2060”

President Xi Jinping on 22 September 2020



No official long-term scenarios but research institutes and universities have a tradition for preparing energy system scenarios

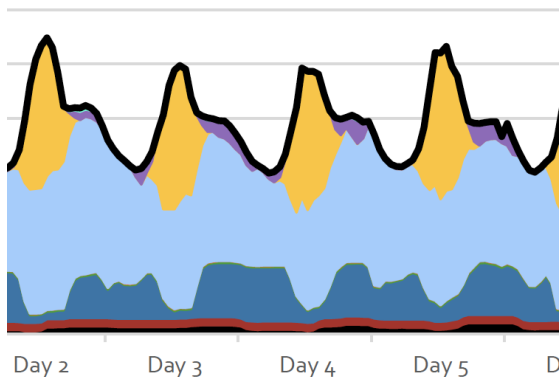




Energy system scenarios
have different roles
before and after the
decision on carbon
neutrality goals



of supply and demand in China's power system



Before: Is the visions and targets possible?

Vision driven – focus on end-goals and backtracking

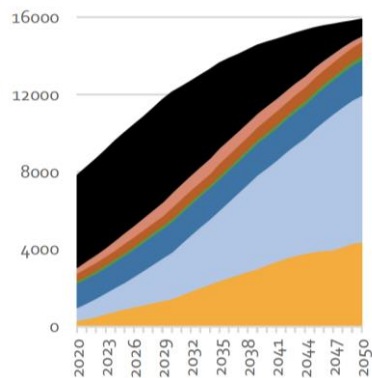
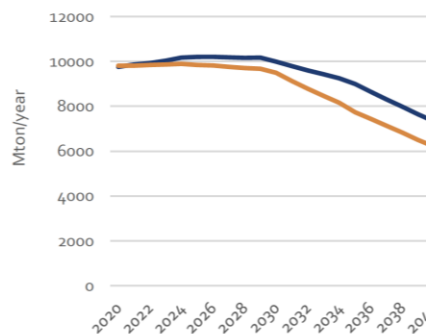
- The scenarios shall make the visions concrete and feasible

Details gives credibility

- The scenarios shall illustrate the details in the energy system operation
- Results should be easy to explain (bottom-up modelling)

Avoid too much reliance on unproven technology

Figure 4: Energy sector CO₂ emissions in the CREO scenarios from 2020 to 2050





After: the target are set – then what?

More focus on implementation

- How to support transformation and avoid making the wrong decisions
- Focus on just transition (employment and resource shifts, distribution effects, energy access and affordability)

Detailed roadmaps based on comprehensive scenarios

- Regional analyses and special roadmaps for coal phase-out, RE deployment, energy efficiency etc.

Scenarios should showcase different pathways and strategic choices

Coordinated policy measures to boost the deployment of renewable

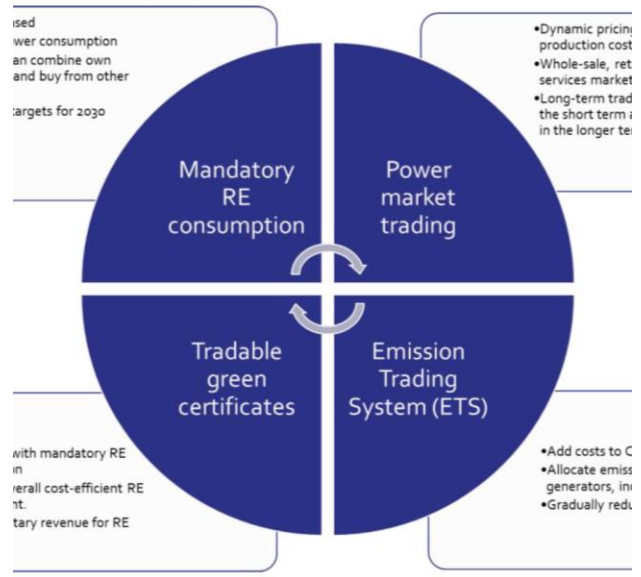
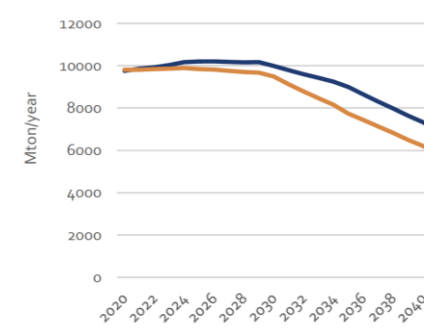
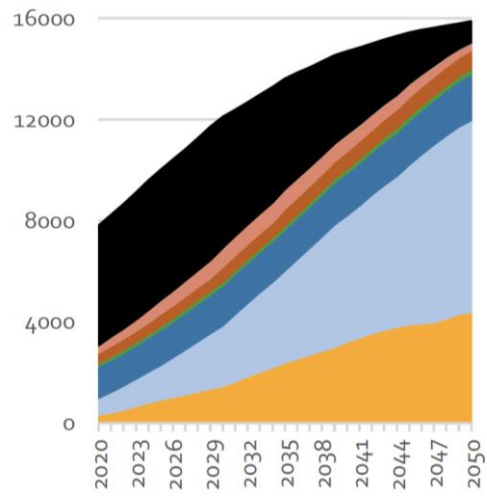
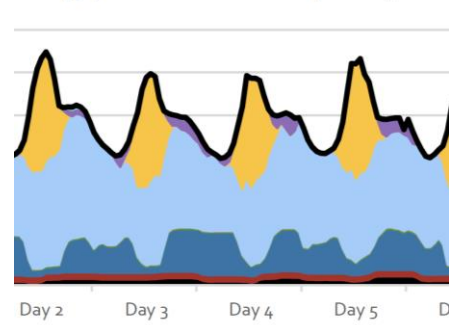


Figure 4: Energy sector CO2 emissions in the CREO scenarios from



of supply and demand in China's power system





Next steps for China

- 14-5 plan on Energy
- Peak before 2030 plan
- Medium and long-term transformation pathways in collaboration with international organisations and other front-runner countries

- Building upon comprehensive and consistent energy system scenarios