

## NBS Good Practices from Chinese government

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### Wind power development through institutional innovation and scientific and technological breakthroughs

#### 1. Background

China is undergoing a revolution in energy production and consumption, vigorously developing new energy and renewable energy. Compared with 2000 when China had a wind-power installed capacity of 300,000 kw, it had an installed capacity of more than 180 million kw in 2018. Yet wind curtailment has long been a problem because wind is an intermittent power source, with a time gap between power generation and consumption. The sustainability of the longstanding practice of regularized price evaluation and subsidy has been cast into question as the government fiscal pressure is growing year by year. As the traditional pricing system has been phased out, the new energy subsidiary model has also become unsustainable. Market reform in the power industry is precipitating reforms in the new energy pricing regime and the adoption of green license has helped boost the development of the new energy industry.

#### 2. Influence and achievement

To fulfill the goal of ensuring sustainable and modern energy, China is actively growing the wind power sector. Under a green license regime, China has supported the adoption of new energy through a bidding process, broken down local protectionist barriers, and alleviated the wind curtailment problem. Moreover, China has also promoted wind power development through technological innovation.

#### 3. Geographic Coverage

China

#### 4. Measures

First, introducing the green license regime. Relevant government agencies jointly issued a Notice on the issuance and voluntary purchase of renewable energy green power certification in 2017 and launched the trading on quotas and green license mandatory restrictions.

Second, initiating preferential policies for wind power. Subsidies are given to power grid companies that receive, store and transmit wind power as incentives.

Third, encouraging technological innovation.

#### 5. Best practice and implications

China has made a series of institutional and technological changes to ensure the sustainable development of new energy industries. First, it has put in place a fair, transparent, and orderly green license trading regime to encourage market competition. Second, it has broken down local protectionist barriers by implementing a quota system. Third, it has boosted the economic efficiency of wind power sector through technological innovation. In this process, partnerships are developed between enterprises and academia, and between government and enterprises, putting the wind power sector on a sustainable and economical development path.

