



COVID-19 Impact on the Chinese Energy Storage Industry

Webinar on Energy Storage in the EU and China

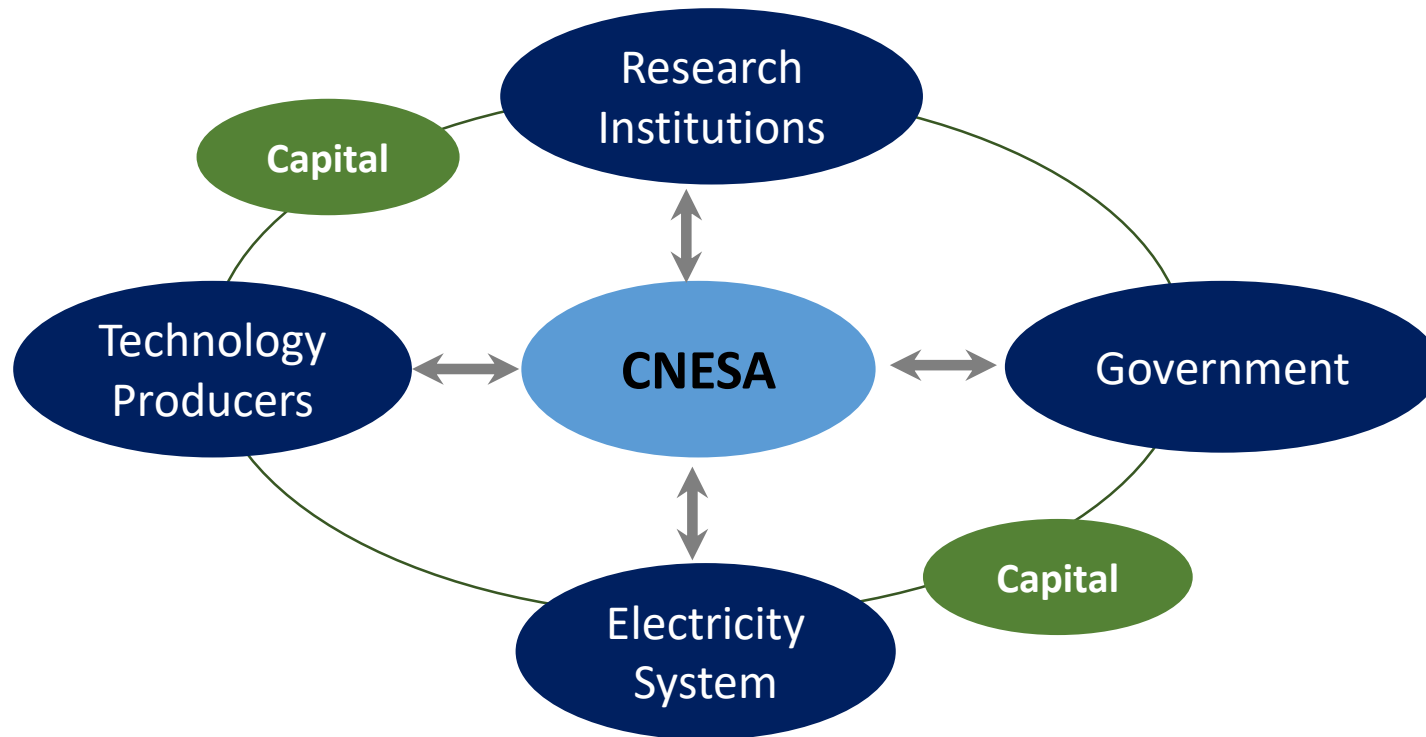
China Energy Storage Alliance

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Mission and Foundation

➤ **Our goal is to promote the development of a viable, sustainable storage industry through:**

- Support of industry policies
- Promoting storage applications and commercialization
- R&D efforts and technology standards



Industry Research



Policy Promotion



Standardization Groups



Industry Networking



Financial Services

Outbreak Timeline

Chinese New Year
Jan 24 - Feb 2

Quarantines begin
Most people have returned home
Businesses close for holiday and remained close due to outbreak

Begin Return to Work
Mid to Late Feb

CNESA surveys of member companies in mid-Feb indicate that most companies have already returned to work, or planned to by late Feb

Travel Restrictions Relaxed
Mid to Late April

Travel restrictions began to relax
Quarantine requirements vary by region
Most travel restrictions relaxed by May 1 holiday

In accordance with local regulations, when does your company plan to return to work?

Answer	Total	Percentage
Already returned to work/production	30	46.88%
By Feb 14	9	14.06%
By Feb 29	22	34.38%
After Mar 1	3	4.69%
Did not stop work/production during Spring Festival	0	0%
Total Respondents	64	

Major Risks and Concerns

Outbreak Risks Vary Among Companies of Different Sizes

Large Companies:

- Diverse revenue streams
- Long project development periods
- May have multiple production lines outside of epidemic areas

Small and Medium-size Companies:

- Project postponements cause greater financial and operational pressure
- Less diverse revenue streams
- May require government assistance such as tax relief

Major Challenges Reported by Survey Respondents:

Employees unable to return to work	72%
Increased production costs	55%
Reductions in orders	50%
Interrupted upstream material supply	44%
Financing difficulties	30%



Long-term Challenges

- Existing pre-outbreak challenges: safety issues of battery storage systems, slowdown in grid-side energy storage growth

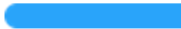



- Additional time may be needed to return to full production

- Growth of epidemic outside of China affecting international project development and product sales

- Behind-the-meter risks: shutdown of industries means no need for I&C projects; government lowering of electricity prices by 5% from Feb to Jun

- Impact to cost reduction rates: international and domestic logistics costs rise, labor costs rise, downstream applications market unable to expand

Once resuming work, how long do you anticipate your company will take to return to pre-outbreak production levels?

Answer	Total	Percentage
Within 2 months	39	 60.94%
2-6 months	22	 34.38%
6 months to 1 year	1	 1.56%
More than 1 year	2	 3.13%
Total Respondents	64	

Major Financial Concerns Reported by Survey Respondents:

Reduced operating income and liquidity	75%
Decline in short-term financing capacities	38%
Inability to repay loans or other debt, increasing financial pressure	25%

Policy Recommendations

- Reducing or exempting corporate tax rates, particularly for small and medium-size companies
- Increased project financing support from the government
- Resumption and acceleration of construction of large-scale energy storage projects once outbreak is contained
- Increased policy support for energy storage as a core component of the energy system

Policy Recommendations Reported by Survey Respondents:

Phased exemption of corporate VAT	63%
Lowering of corporate VAT, income tax, and other tax rates	59%
Provide subsidies for rent, utilities, and other expenses	47%
Provide job stability subsidies	45%
Phased reduction of social insurance payments	40%
Provide subsidized loans	40%

Approximately 30% of companies expect a decrease in revenue greater than 20% in the first half of 2020

More than 65% surveyed believe that new industry opportunities will emerge once the epidemic has passed