income risks using 30 weather scenarios data in Central West Europe
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11.11.2022 Berlin
• Growing dependency on weather-driven generation
• Creation of weather scenarios
• Monthly weather dependent variety 1985 to 2015
  • Germany
  • France
• Financial risks
• Conclusion
Growing dependency on flexible generation

With the increasing fluctuating renewable generation capacity, forecasting just one pathway of the generation becomes not sufficient anymore.

Source: Value Insight long-term reports
Weather scenarios

Idea
Using past years as example for repeating weather behaviour by normalizing the past and apply it in the future with adjusted capacities.

Advantage
Variety of forecasts include past extremes and allow for better risk management.

Usability
Solar, Wind and Consumption behaviour, potentially Hydro
1986-2015 database
Monthly weather dependent variety 1985 to 2015: Inputs

Wind generation

Solar generation

Consumption

Germany

France
Different capacity fleet – similar weather risks

Price deviation boundaries France

Price deviation boundaries Germany

France Price Forecast with weather-driven price probability distribution

German Price Forecast with weather-driven price probability distribution
Conclusion

No single forecast pathway

Different capacity fleets – similar weather risks

Upside and downside risks