

# China's coal overcapacity crisis

China is currently building more coal power plants than it needs



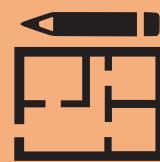
**895 GW**

existing coal capacity\* used less than half of the time



**205 GW**

coal capacity under construction



**405 GW**

coal capacity planned

\*as of July 2016

Existing capacity fulfils power generation requirement until **2050**

**Half a trillion US\$** could be wasted on coal plants under construction and planned

## Why is China's coal capacity at risk?

China's power demand growth is slowing down. 10% to 3% per year

## 13th Five-Year Plan doesn't add up for coal generation

13 FYP low-carbon capacity targets → Low power demand → Declining capacity factors → Early plant retirements → Coal stranded assets

In 2015 alone China built:



2 coal plants per week



1 football pitch of solar panels every hour



1 large wind turbine every hour

Power market reforms & national ETS can halve the gross profitability of the existing fleet.

Based on CTI '2020 reform scenario'

\$US10 t/CO<sub>2</sub> carbon price

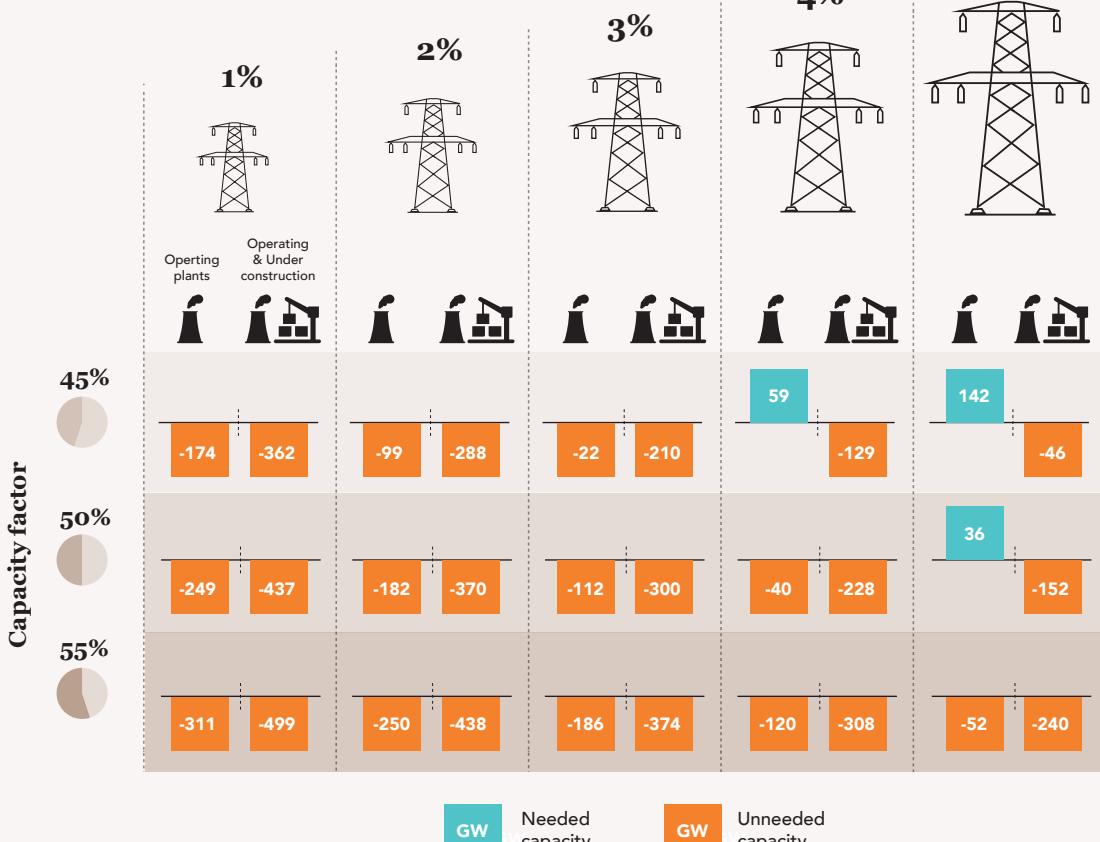
15% fall in coal power tariffs

27 GW cash-flow negative

140 GW with gross profit of US\$5/MWh or less



### Annual power generation growth



Additional capacity beyond existing plants is only required by 2020 if power generation growth exceeds 4% per year and coal plants are run at a capacity factor of 45% or less.