Coal Power and the Bridge Scenario

The contribution from reducing inefficient coal plants

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Three stages to reducing inefficient coal

Reducing the use of inefficient coal plants under the Bridge Scenario has three key stages:

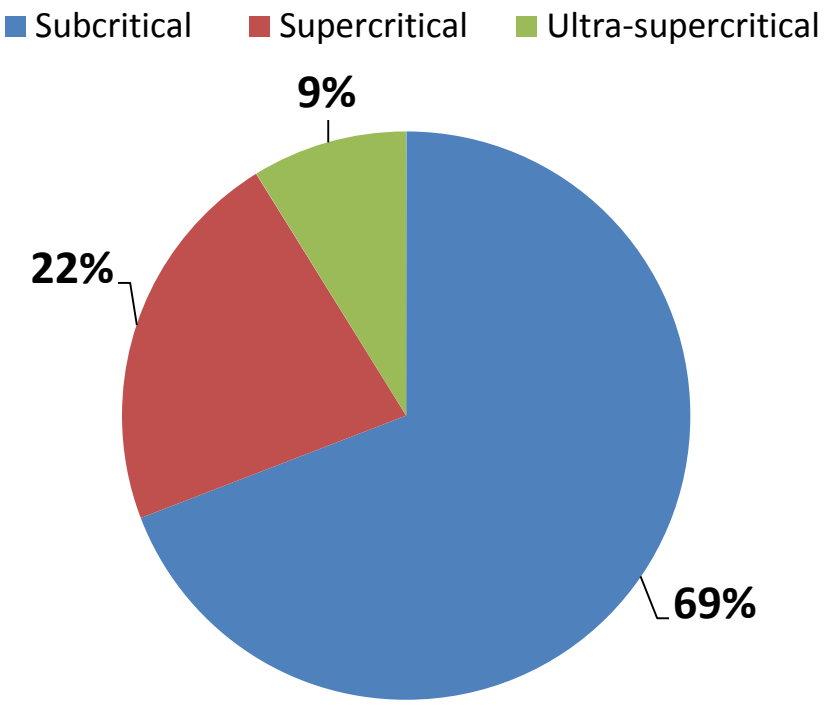
1. A ban on the construction of new inefficient plants;

2. A reduction in the level of operation of the least efficient plants that are under construction (but ensuring that they can still recover the investment costs); and

3. The retirement or idling of all aging inefficient plants that have already repaid their investment costs (to the full extent possible without compromising power system reliability)

Inefficient coal plants still dominate global operational capacity

Operational global coal capacity by plant type, 2015

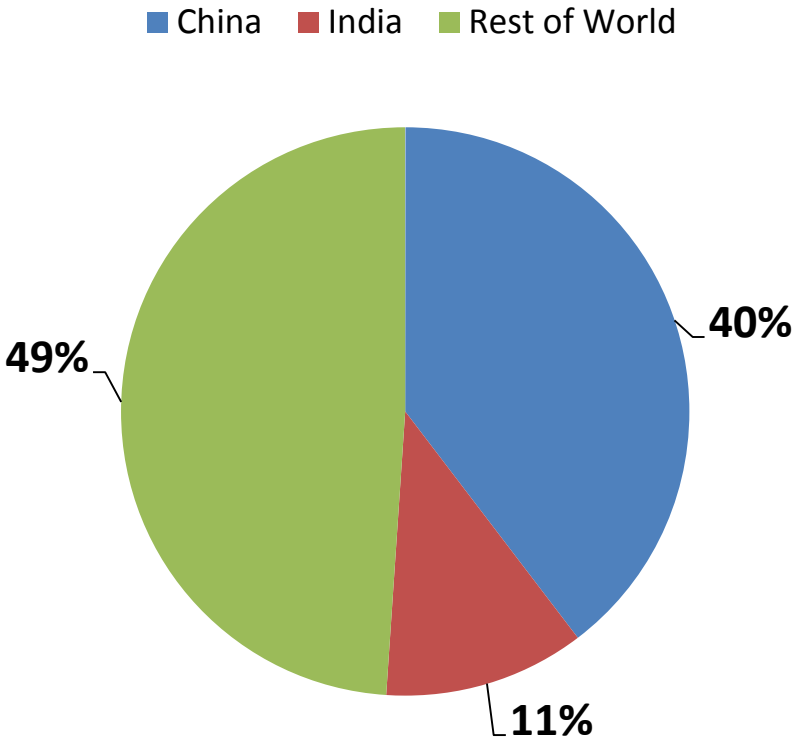


Source: Platts Power Plant Database, 2015

Subcritical technology is still the dominant form of coal-fired generation: as of 2015, 69%, 22% and 9% of global capacity is subcritical, supercritical and ultra-supercritical, respectively

The use of inefficient coal plants is a global issue

Subcritical coal plant capacity by region, 2015

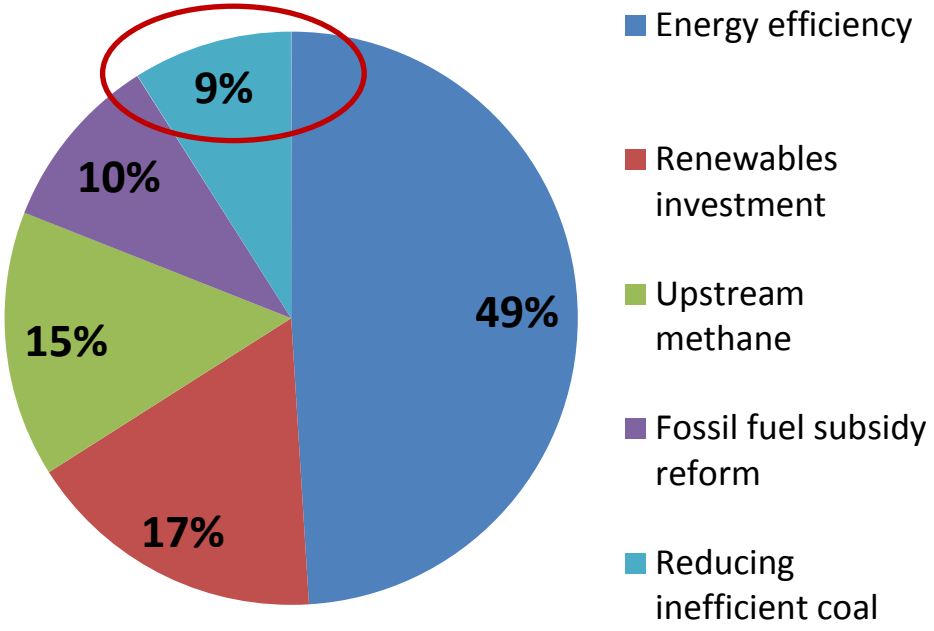


Source: Platts Power Plant Database, 2015

Operating subcritical coal plant capacity is not just an issue for non-OECD Asia

The impact of reducing the use of inefficient coal plants

Emissions savings in the Bridge Scenario by measure, 2030

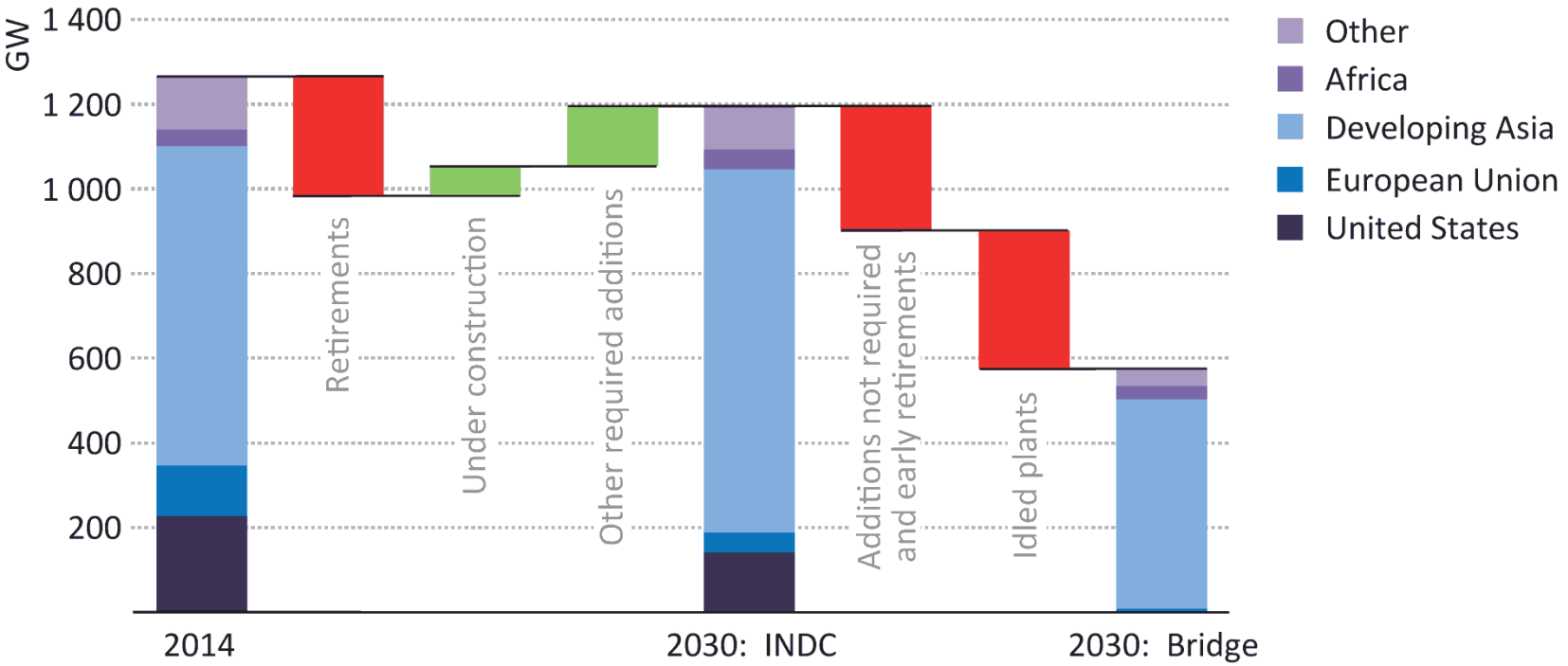


Source: WEO, 2015

Reducing the use of the least-efficient coal-fired power plants and banning their construction could save nearly 450 million tons of CO_2 between now and 2030

Inefficient coal plant use: INDCs versus the Bridge Scenario

Capacity of subcritical coal in the Bridge and INDC Scenarios



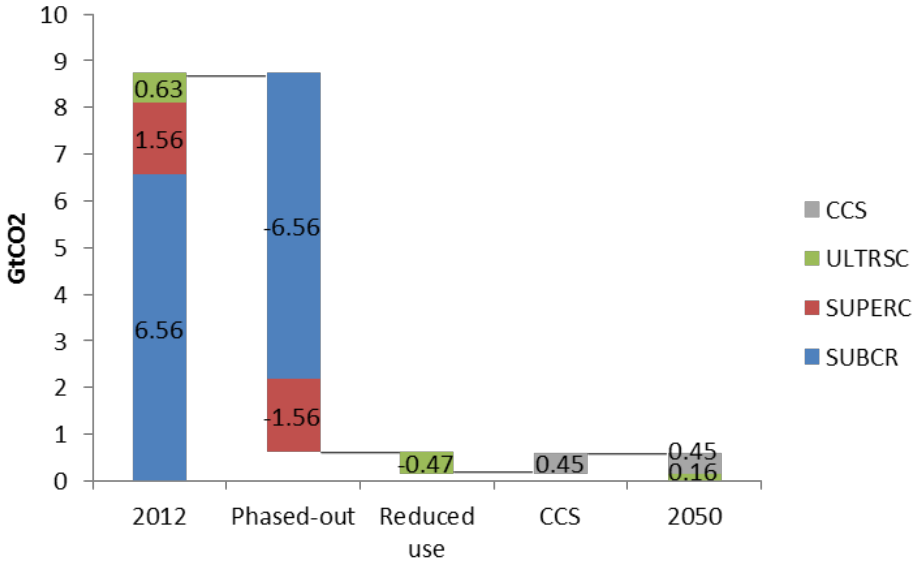
Source: WEO, 2015

Despite the INDCs, inefficient coal plants installed in 2030 are only marginally lower than today, whereas under the Bridge Scenario they halve from current levels

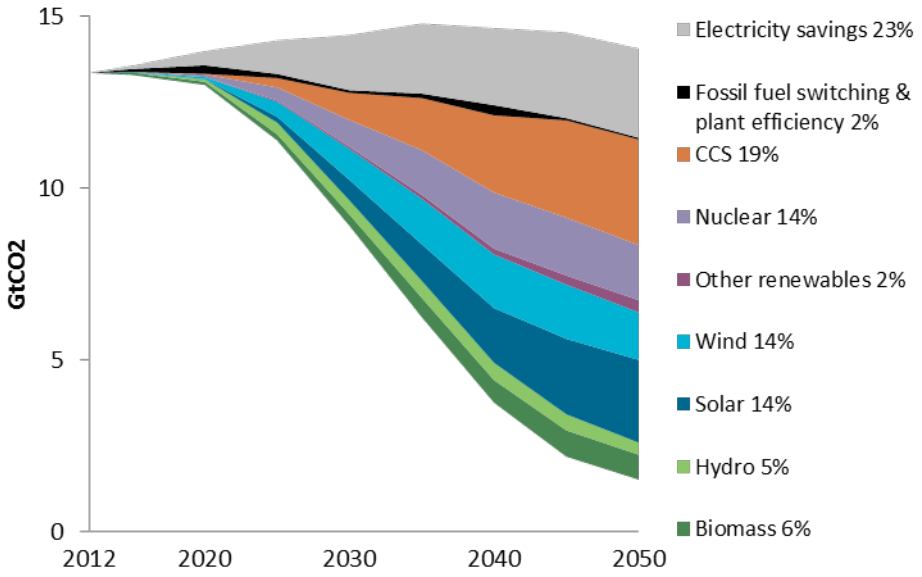
The long-term role of unabated efficient coal plants

Efficiency gains cannot come at the expense of 'lock-in'

Change in annual CO2 emissions from the global coal plant fleet by technology under the 2DS



Key technologies to reduce global power sector CO2 emissions between 6DS and 2DS



Source: ETP 2015

While efficient plants offer potential to make significant emissions reductions, over the long term only the addition of CCS – combined with a phase-out of inefficient plants – can deliver the cuts needed for a 2 degree pathway

Thank you for your attention

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