International trends for coal

How are leading jurisdictions phasing out coal in a manner that addresses the health, environmental, and economic implications of the technology?

Taylor Kuykendall
Coal Reporter
The downward spiral of coal is the result of multiple factors. No one factor is killing coal, nor will one revive it.
The US coal market is but a fraction of what it once was only a few years ago

The future is highly uncertain
Much of the industry is bankrupt
Public opinion largely against coal
A market decimated...

The market value of all public coal companies in the US have been destroyed.

Only one has experienced any recent stability despite a recent turnaround in coal prices.

That company is CONSOL Energy, a company that has essentially eschewed coal for the exploration and production of natural gas.
Example of coal flow from one bankrupt mine

As of May 12, 2016.
Mine ownership is sourced from the U.S. Mine and Safety Health Administration as of the fourth quarter 2015.
Flow lines not representative of any shipping routes.
Source: SNL Financial, an offering of S&P Global Market Intelligence
Map credit: Elizabeth Thomas
Coal only to dominate few states
Coal retirements scheduled across the US
Lost jobs and production response

Average US mine employees and total coal production by quarter

As of Aug. 23, 2016.
Source: SNL Energy, an offering of S&P Global Market Intelligence
Coal tech currently not as well-funded

![Bar chart showing Department of Energy budget allocation (in $M) from 2012 to 2016 for Renewables and CCS technologies. The chart indicates a higher allocation for Renewables compared to CCS in most years, with peak allocations in 2016.](image-url)
Near-term forecast

Average US mine employees and total coal production by quarter

S&P Global
Market Intelligence
EIA projections for long-term

Figure MT-9. Primary energy use by fuel in two cases, 2015, 2020, 2030, and 2040

quadrillion Btu

S&P Global
Market Intelligence
EIA international coal outlook

Figure 4-1. World coal consumption by region, 1980–2040

quadrillion Btu
Ontario as an example
Infrastructure challenges of a coal phase out
Thank you

Taylor Kuykendall
Coal Reporter
T: 434.951.7862
taylor.kuykendall@spglobal.com