INTERNATIONAL FINANCING FOR COAL-FIRED POWER PLANTS

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UNECE

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WHO ARE WE?

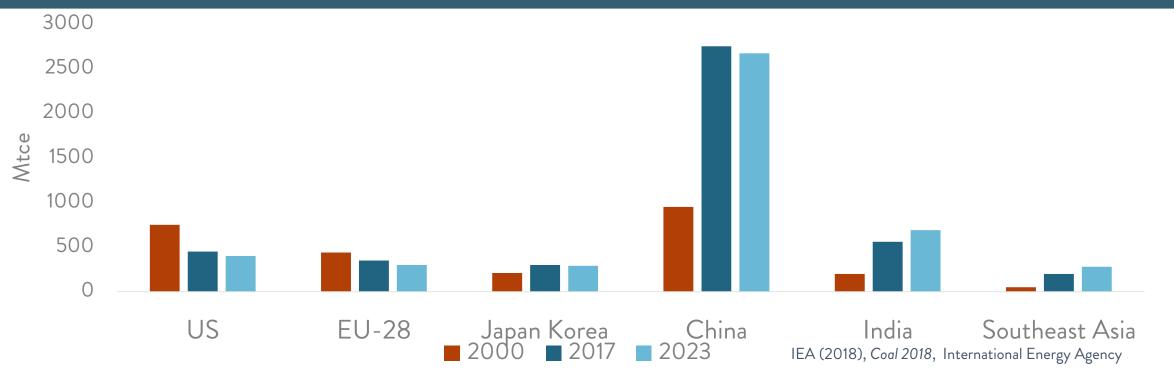


Technology Collaboration Programme
by lea

- The IEA Clean Coal Centre is part of a network of autonomous collaborative partnerships focused on a wide range of energy technologies known as Technology Collaboration Programmes (TCPs)
- The TCPs are organised under the auspices of the International Energy Agency (IEA), but the TCPs are functionally and legally autonomous
- We are funded by national governments (contracting parties) and by corporate industrial organisations (sponsors)
- We are dedicated to providing independent information and analysis on how coal can become a cleaner source of energy, compatible with the UN Sustainable Development Goals



CONSUMPTION IS PLATEAUING NOT DECLINING



COAL CONSUMPTION HAS REACHED A PLATEAU, WITH FALLING DEMAND IN OECD REGIONS BEING OFFSET BY INCREASING DEMAND IN ASIA, AFRICA AND OTHER DEVELOPING REGIONS



THE DIFFERENT ENTITIES INVOLVED IN FINANCING COAL PROJECTS

Institutional investors

Commercial banks

Underwriting of shares and bonds

1. Mining companies

Multilaterals

Loans to developers

2. Utilities

Public financial institutions

Risk guarantees and loans

3. Power plant developers

Company balance sheet

Balance sheet financing (equity)

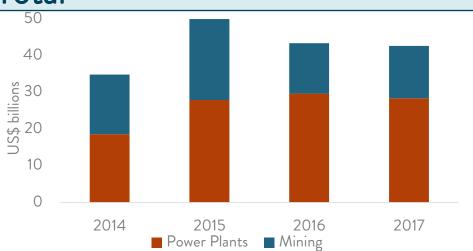
When assessing financing flows for new investments, there are different definitions of new financing.

- Finance at commissioning
- Finance at drawdown stage
- Financial close



THE BIG FINANCING PICTURE

US\$ billions	2014	2015	2016	2017
Multilateral commitments	<1			
PFI commitments	9	5	8	14
Financing from large banks	35	50	43	43
Other financing (including balance sheet financing)	108	91	98	82
Total	152	146	149	139





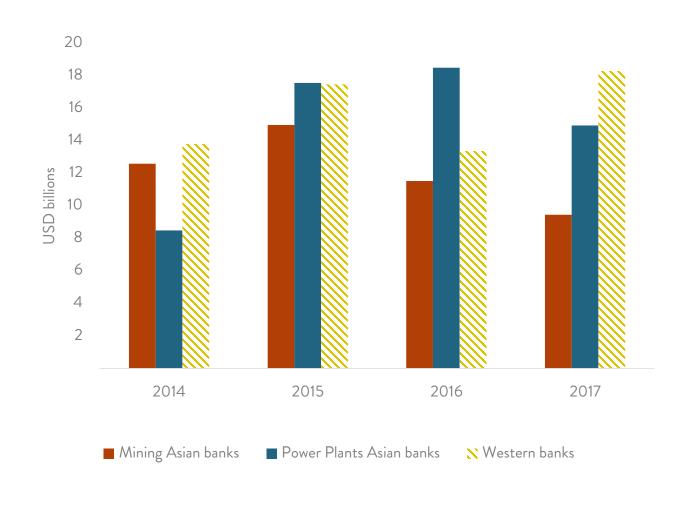
Large bank financing

Other financing



ASIAN BANKS: CONTINUED TO LEND AND INCREASE THEIR EXPOSURE TO COAL

- Large Asian banks (notably Chinese ones) provide significantly more funding to coal projects than western banks
- China is seen as a lender willing to fund international coal projects
- Are these commercial or PFI loans?





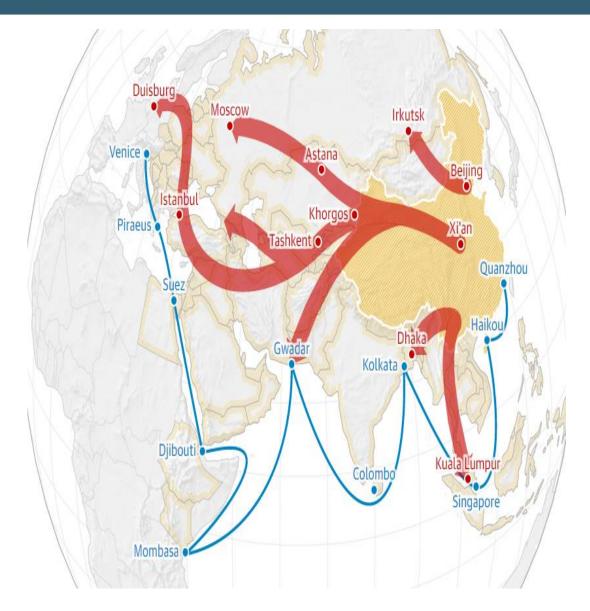
TREND TOWARDS USC AND SC COAL POWER

(PLATTS 2019

- The global coal power fleet is now some 2030 GW, with , some 700 GW of new capacity installed since 2010
- A further 153 GW of new capacity is being built in 32 countries (Africa, Middle East, Asia)
 - 80.4 GW of ultra-supercritical (USC)
 - 53.7 GW of supercritical (SC)
 - 15.4 GW of subcritical (mainly small units)
- Some 274 GW in the planning stage across 60 countries, with 75% in Asia



BELT OF OVERLAND ROADS AND A MARITIME ROAD OF SHIPPING LANES



- Multibillion programme to boost ties in 71 countries that are economically connected by trade and investment with China
- Equivalent to a quarter of global GDP via investments in energy and infrastructure using Chinese expertise and technology
- Energy plays large role, oil/gas pipelines, LNG, transmission, nuclear, renewable and various coal investments
- China has invested in 67.9 GW of new coal-fired power in target countries since 2014
- Between 2014 and 2017, six Chinese banks provided US\$ 25.7 bn worth of syndicated loans for electricity projects in target countries of which 40% was for coal-fired generation