

## **Powering Past Coal Alliance**

Platform for Coal Regions in Transition 15 July 2019

Dr Matthew Webb Business, Energy and Industrial Strategy UK



## Overview

- UK's Domestic Journey
- The Global Context
- The Powering Past Coal Alliance



# International Perspectives on Coal





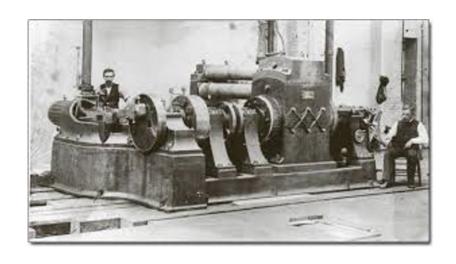




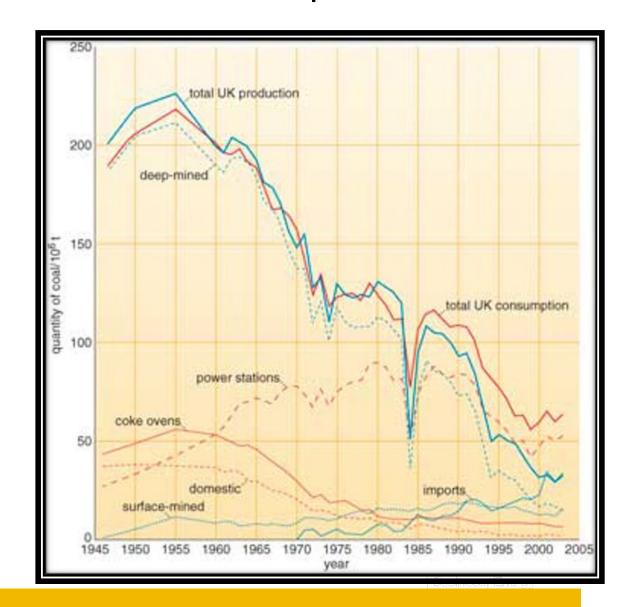




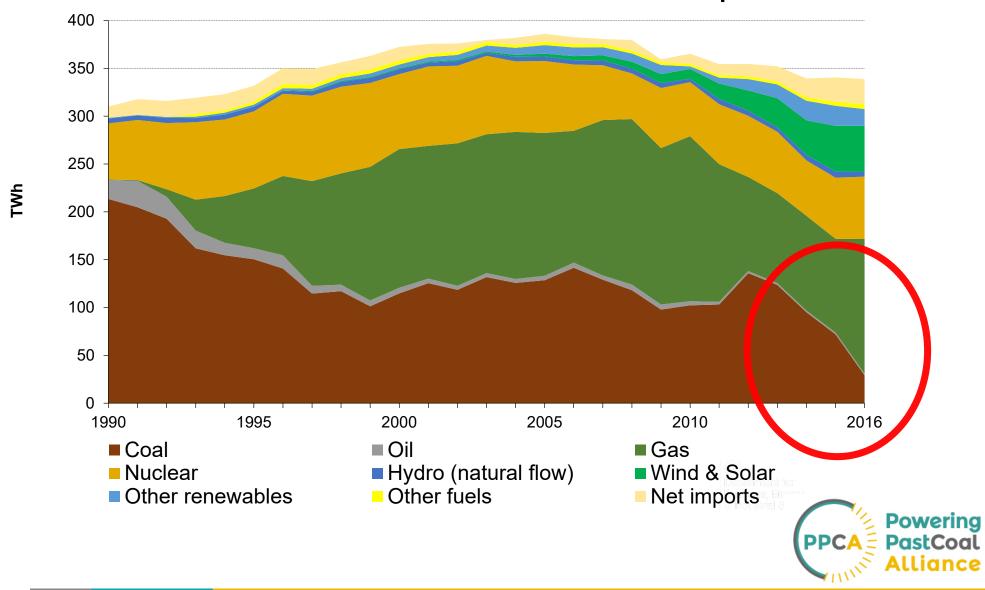
# UK's transition from coal fired power





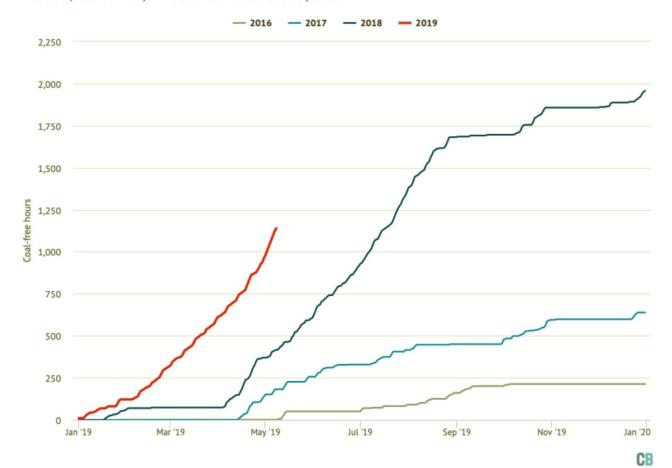


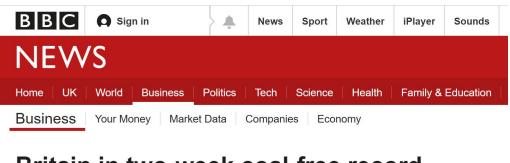
# UK's transition from coal fired power



#### Great Britain has already run for 1,139 hours without coal in 2019

That's the equivalent of 47 days - more than a third of all hours this year so far





#### Britain in two-week coal-free record

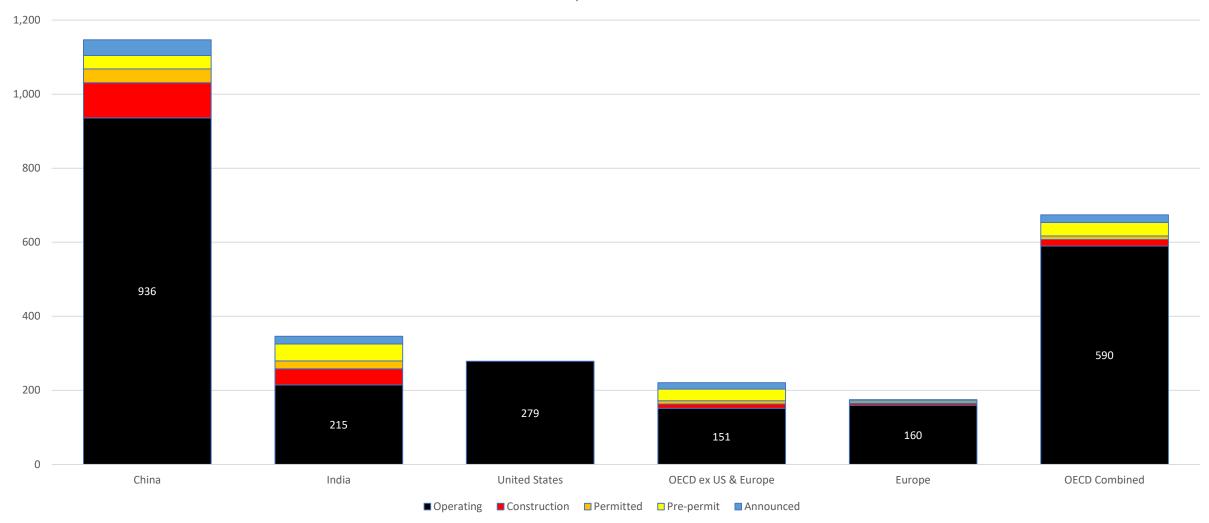
Share ③ 31 May 2019



Britain has not used coal to generate electricity for two weeks - the longest period since the 1880s.

# Global coal use (2000 existing +300 planned GW)

China, India & OECD



Source: Global Coal Plant Tracker and E3G

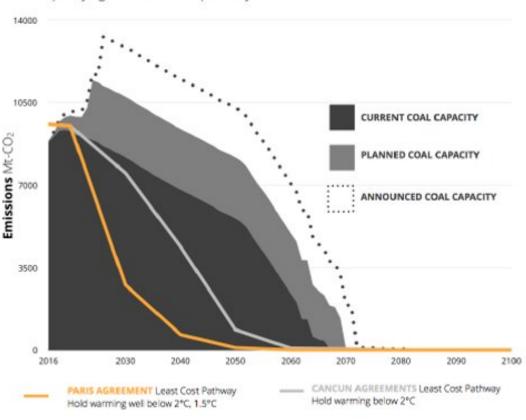


# Current coal plants far exceed Paris compatible levels..



**WORLD** potential CO<sub>2</sub> emissions from existing and planned coal capacity against least-cost pathways.





Source: IIASA/Joeri Rogelj, GCPT, own calculations

- ✓ Coal phase-out by 2050
  - By 2030 OECD
  - By 2040 China
  - By 2050 Rest of World
- ✓ No new capacity can be installed and operated over its full economic lifetime anywhere
  - Great risk of stranded assets
  - Current plans in many regions not in line with Paris Agreement

Climate Analytics, 2016



# What is the Powering Past Coal Alliance?



PPCA Launch at COP23



# What is the Powering Past Coal Alliance?

We are a global alliance of national and sub-national governments, businesses and organisations working to advance the transition away from unabated\* coal power generation.

- ///// Government members commit to phasing out existing unabated coal power generation and to a moratorium on any new coal power stations without operational carbon capture and storage, within their jurisdictions.
- ///// Business and other non-government members commit to powering their operations without coal.
- ///// **All members commit to supporting clean power generation through their policies**(whether public or corporate, as appropriate) and investments, and to restricting financing for unabated coal power generation, ie without carbon capture and storage.

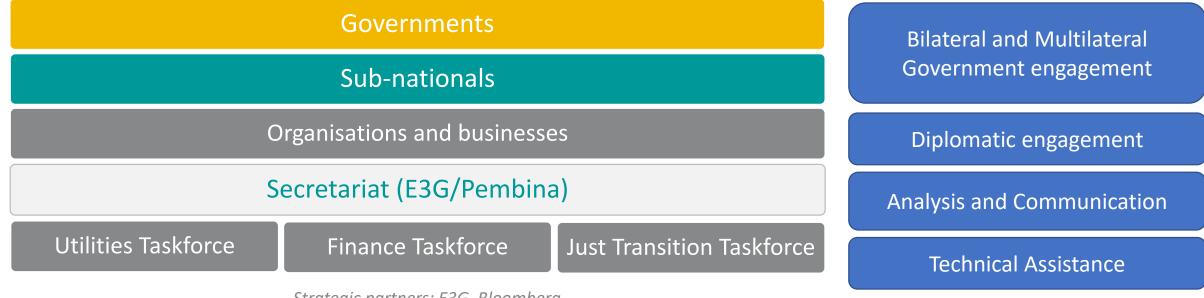


# Key objectives of the Alliance

- Continue to grow the alliance with new members, plus amplifying and accelerating phase out commitments by members
- 2. Influence proponents of new coal, domestically and internationally to switch support to clean energy alternatives [Supply]
- 3. Engage and provide support for major coal economies to consider the transition from coal [Demand]



## Alliance structure and workstreams



Strategic partners: E3G, Bloomberg

**UK** provided £20M to the World Bank's **Energy Sector Management Assistance Program** (ESMAP), a global knowledge and technical assistance program administered by the World Bank. This funding will provide financial, technical and advisory support for developing countries that have decided to transition away from coal and accelerate the uptake of cleaner sources of energy.

Canada has pledged up to CAD \$275 million to fund the Energy Transition and Coal Phase-Out Program. This funding will help developing countries in Asia to slow coal production, while scaling up energy efficiency and low-carbon energy alternatives.

# Workshop Discussion

## Powering Past Coal Alliance: Activities

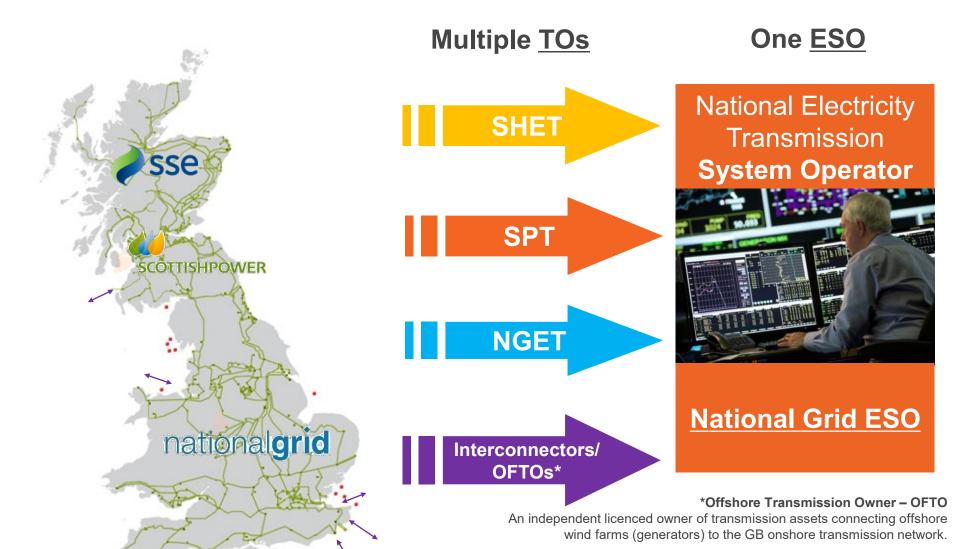
- 1. Utilities Taskforce: Demonstrating electricity generation leadership, engagement through Bloomberg New Energy Finance Summit series. SSE, Iberdrola, Orsted, Drax.
- 2. Just Transition Taskforce: Sharing real world best practice and experience of challenge of phasing out coal. 18 members including Just Transition Centre; TUC; PCS Union; CACC Trade Union Group; Centre for the Study of the Production of the Built Environment; Grantham Institute, LSE; Canadian Labour Congress; Mercator Research Institute; Climate Strategies; University of California; TERI School of Advanced Studies; University of Alberta; Instytut Badań Strukturalnych; University of Cape Town.
- **3. Finance Principles**: Translating 2030/2050 phase out into action for Financial sector. CCLA, Aviva, Hermes, Church Commissioners for England, UN PRI.
- **4. Technical Assistance:** £20M World Bank ESMAP (potential for China, India, South Africa and others)
- **5. Bilateral projects**: Chile, Mexico, Philippines.
- **6. Communications**: Website, Member profiles, Transition videos (Bloomberg Philanthropy support), Secretariat.

National Grid
Electricity System
Operator





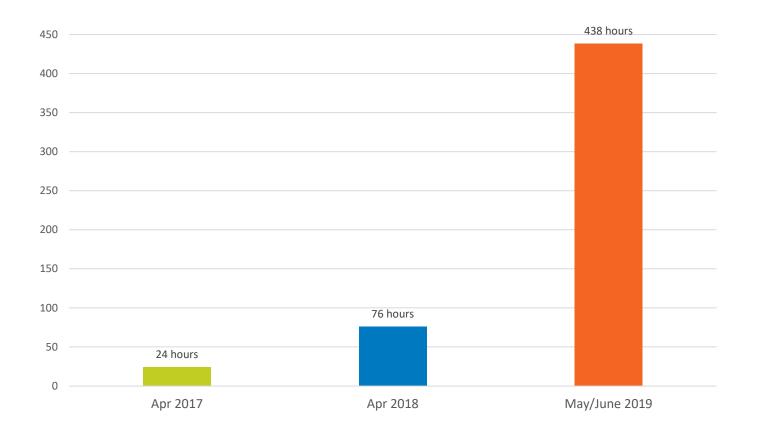
## Our role as the Electricity System Operator





## How we got to a zero-coal fortnight

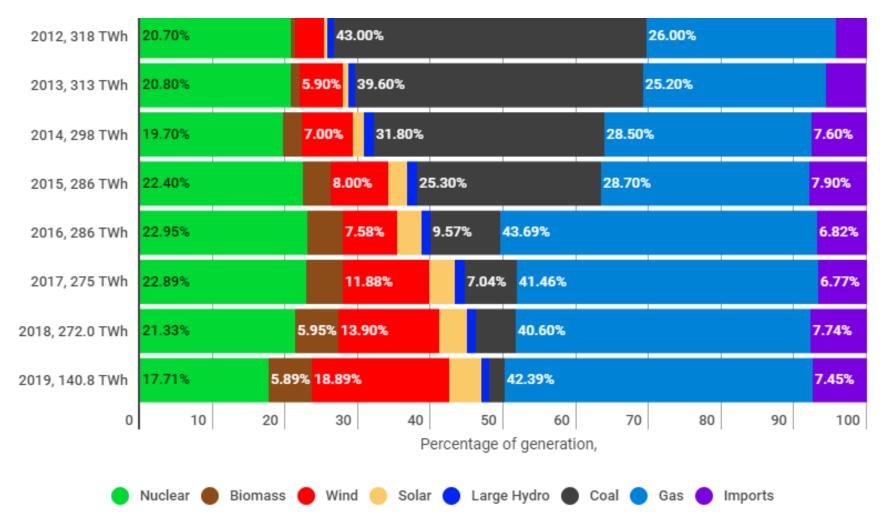
#### Record for longest run without coal







## **Decline in Coal over time**







## **Zero Carbon Operation by 2025**

#### An electricity system that can operate carbon free

#### Key Enablers

#### **New Technology**

New providers of inertia, short circuit infeed and dynamic voltage support to deliver innovative sources of flexibility and dynamic stability

#### **New Players**

Increasing participation of demand side along with the emergence of new business models and combined technologies

#### **New Markets**

Marketplaces to efficiently source all of the new products and services that are needed, and opening up the markets to all

#### **New Control Room tools**

Advanced situational awareness and monitoring of system status plus real time dynamic analysis of system stability, improved forecasting





## **Power Responsive**



#### £500m

If just 5% of peak demand is met by Demand Side Response solutions it could benefit consumers by approximately £500 million.



- Demand Side Response (DSR) intelligent energy use in action
- Increasing, decreasing, shifting power consumption:
   lower energy costs & reduced carbon footprint
- Focal point to turn debate into action help DSR grow
- Brings together policy makers, energy industry, industrial & commercial businesses

Power Responsive is all about how society can use electricity in a more intelligent way. Collaborative programme that involves 700 stakeholders, aimed at delivering innovative, cost effective, low-carbon energy solutions where consumers are in control.



## **Distributed ReStart**

# nationalgridESO





- A National Innovation Project in partnership with TNEI a specialist energy consultancy and Scottish Power Energy Networks a Distribution Network Operator
- Project ReStart looks at how to incorporate Distributed power generation to the ESO's Transmission Blackstart procedures
- Should this project be successful it will allow greater flexibility to the national network to aid the speed of any potential restart
- By bringing in distribution assets we're preparing for a future without coal, which currently provides some of these services.



## How we're working with others









# International Initiatives Supporting Coal Transition

Platform for Coal Regions in Transition 5<sup>th</sup> Working Group Meeting

15 July 2019

**Dr James Rydge** 













## Investing in a Just Transition (I)

- "Climate change and the just transition: A guide for investor action", 2018.
  - Five reasons why investors are interested in acting to support a Just Transition.
  - Five action areas for investors.
- Global Investing in a Just Transition programme (ITUC, PRI, IRI)
  - Equip institutional investors to play a pivotal role in supporting a just transition (September 2019-2022).
    - Analytical foundations
    - Achieving Impact
    - Active communication and outreach
    - Knowledge management







## Investing in a Just Transition (II)

- Early days, but our forthcoming UK report (September) examines the role of investors in ensuring a responsible phase out of coal. Includes a Drax case study.
- Key priority is building JT narratives that bring different groups together. IJT programme focuses on investor action. Who is focussing on local communities?
- Just transition policy for coal is not new in the EU. Coal in transition for decades, for example:
  - Poland coal restructuring from 1990 workforce dramatically reduced. A role for a Just Transition sovereign bond?







# INTERNATIONAL INITIATIVES SUPPORTING COAL SECTOR TRANSITION

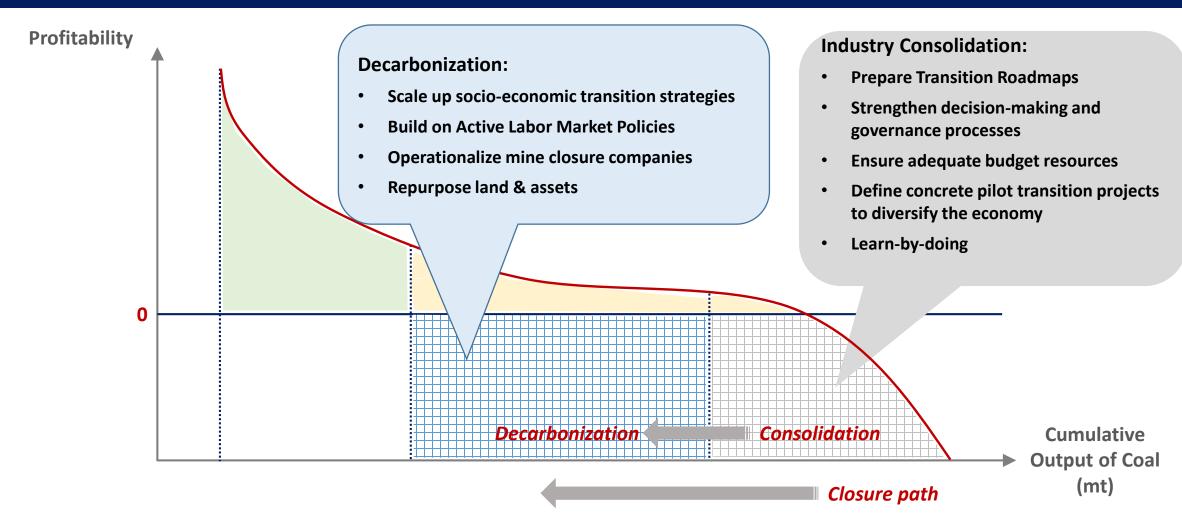
WORLD BANK'S GLOBAL SUPPORT TO COAL REGIONS IN TRANSITION

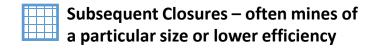
PLATFORM FOR COAL REGIONS IN TRANSITION | 5<sup>TH</sup> PLENARY & WORKING GROUP MEETINGS WORLD BANK ENERGY AND EXTRACTIVES DEPARTMENT — GLOBAL PRACTICE BRUSSELS, BELGIUM | JULY 15-16, 2019



#### **From Consolidation to Decarbonization**









### Additional Resources Needed: Global Support Provided by World Bank

# **Component 1 Preliminary Client Dialogue**

- Supports early-stage dialogue with clients in coal-dependent regions or countries who recognize the sector is in consolidation or transition and are deliberating upon measures to be taken
- Uses dialogue, workshops, analysis

   (and potentially other knowledge
   exchange fora) with interested
   clients and other stakeholders to
   present best practices on approaches
   and frameworks to transitioning coal
   sector

# Component 2 Country Level Engagements

- Supports client coal-regions (and countries) who have taken the decision to reduce coal production.
- Develop a comprehensive road map for coal sector transition:
  - i. Institutional arrangements
  - ii. Stakeholder engagement and communications strategy
  - iii. Regional development strategy
  - iv. Measures to consider beyond national labor protection policies
  - v. Master Plan for repurposing land and assets

# Component 3 Global Knowledge

- Closes global knowledge gaps on approaches and measures to implement coal sector transitions:
  - i. Case studies on socio-economic transition
  - ii. Future of jobs: case for reskilling, mobility and market demand
  - iii. Repurposing of land and other assets: a toolkit for implementation
  - iv. Compendium on people and communities from CEM10
  - v. Mitigation of AMM and CMM
  - vi. Examining gendered impacts of coal mine closure

Regional Platforms modeled after EC Coal Regions in Transition Platform

Global Platform for Coal Regions in Transition

## Additional Resources Needed: Global Support Provided by World Bank

Proposed: Regional Platform for Coal Regions in the Western Balkans and Ukraine

- To be led by the World Bank
- Collaboration with the EC Coal Regions in Transition Platform possible twinning arrangement
- Energy Community Secretariat on outreach
- Further discussion in Natolin Warsaw on 12<sup>th</sup> and 13<sup>th</sup> September



### **Program Design to Achieve Just Transition for All in Coal Sector Transition Process**

Achieving a *Just Transition for All* requires strong analytics to inform development of comprehensive transition road maps, and identification of concrete projects that mitigate the social impacts on labor and communities.

3 Phases of Work

Phase II Phase III

#### **Preliminary Dialogue**

#### 6 months

- Workshops/forums that would include presentations on World Bank's case studies and international experience
- Stakeholder consultations towards systematically approaching the design of a Roadmap that supports a coal sector transition
- Field visit to coal mining areas and discussions with non-government actors

#### **Road Map for Project Design**

- 10-18 months
- Application of the World Bank's coal sector transition assessment framework
- Analytical work on governance structure, social (stakeholders, labor force), economic and environmental aspects of the transition, and feasibility studies
- Broad agreement on the Transition Roadmap underpinned by the above analytical work

#### World Bank Support of Concrete Transition Projects

- 5+ years
- Policy reforms supported by World Bank's development policy financing (DPF)
- Investment project financing (IPF) supporting social protection programs, reclamation of mines and power plants, and repurposing of these lands and assets for alternative uses



## **World Bank Existing Engagements**

**Serbia**: managing social impacts to workers and communities; repurposing land and assets in Resavica (\$500,000)

**Greece**: coal sector fair transition road map in lignite religions of Western Macedonia (€500,000)

**South Africa**: early stage discussions on planning for a coal sector transition as part of broader energy sector transition

Western Balkans and Ukraine: World Bank-EC collaboration to develop a regional platform for coal regions in the Western Balkans and for Ukraine

**China**: Shanxi Energy Transition and Green Growth Development Policy Operation as part of China's energy revolution (\$300 million)

## **THANK YOU**

PLATFORM FOR COAL REGIONS IN TRANSITION | 5<sup>TH</sup> PLENARY & WORKING GROUP MEETINGS
WORLD BANK ENERGY AND EXTRACTIVES DEPARTMENT — GLOBAL PRACTICE
BRUSSELS, BELGIUM | JULY 15-16, 2019
MICHAEL STANLEY | GLOBAL LEAD MINING SPECIALIST | MSTANLEY@WORLDBANK.ORG

