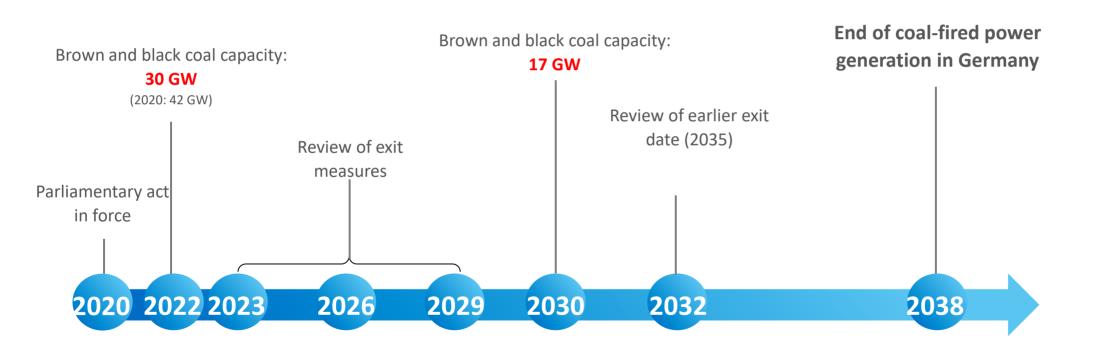






Germany's Coal Exit

The coal exit act stipulates 2038 as latest end date for coal-fired power generation and includes several points of review.



Sources: BPA, 2019; clean energy wire, 2019 © GTAI 3



Germany's Coal Exit

The phasing out of coal-fired power plants means open cut coal mining will end as well.

- The coal production in Germany is almost exclusively used for local power generation.
- Negative impacts for the employment situation in affected regions.
 Rhineland Mining Area could loose 30,000 direct and indirect jobs, in the Lusatia Region 16,000 jobs are at stake.
- Workers of affected coal power stations or collieries, who are aged over
 58 years, are eligible for compensation payments.
- Energy companies owning affected coal power stations will receive a financial compensation of up to 4.35 billion Euro.

Rehabilitation of Open Cut Mines will cost Billions

Rehabilitation measures include revegetation and large scale flooding of open mining pits.

- Lusatia Region: estimated rehabilitation cost for 35 open cut mines of at least 14 billion Euro.
- Rhineland Mining Area: estimated rehabilitation costs for 3 open cut mines of at least 2 billion Euro.
- Financial compensation paid to energy and mining will be mainly used to fund the rehabilitation programs.
- Constant research and innovation required to manage the water quality of flooded open mining pits and prevent high salinity.



Schwerin Hamburg Bremen Helmstedter Area Berlin Potsdam Hannover Magdeburg Central German Area Düsseldorf Erfurt Dresden Lusatia Region Wiesbaden Rhineland Mining Mainz Saarbrücken Stuttgart München OpenStreetMap contributors

Economic Transition of Coal Regions

40 billion Euros will be invested in brown coal regions until 2038.

Financial support for the brown coal regions:

- Lusatia Region will receive 17 billion Euro
- Rhineland Mining Area will receive 15 billion Euro
- Central German Area will receive 8 billion

Additionally, several black coal regions will also receive financial support of 1.1 billion Euro.

Source: @DEBRIV



Transformation will make Mining Regions Economically Stronger

Huge basket of economic support measures.

- Massive infrastructure investment to connect mining regions to neighboring economic hubs: more than 170 projects for road and rail.
- Building a world class R&D landscape to boost innovative industries:
 more than 20 R&D institutions will be established.
- Attracting new industries such as battery production, semi-conductors
 Power-to-X and future fuels.
- Mining regions will be transformed into future energy regions. Several programs to establish model region for green hydrogen, zero carbon mobility etc.

Source: @GettyImages Mischa Keijser

Mine Site Rehabilitation

Major challenges in Australia as well.

- Rehabilitating 21 open cut coal mines in the Hunter Valley will cost at least 12 billion AUD.
- Not limited to coal regions, close to 200 Australian mines are projected to close in the next 10 years.
- Approximately 75% of mine closures in Australia are unplanned or premature.
- Less than 30 Australian mines have ever achieved complete closure and relinquishment.
- There are at least 50,000 mines with legacy environmental issues in Australia.





Economic Transformation

Australian coal mining regions are affected in different ways.

- Latrobe Valley: focused on brown coal mining for local power generation.
- Illawarra Region: focused on the local steel industry.
- Hunter Valley: export-oriented, with local power generation as well.
- Bowen and Surat Basins: export-oriented, with local power generation as well.



Economic Transformation

Several Australian activities are already underway.

- Latrobe Valley Authority was established to diversify the economic structure as response to the closure of the Hazelwood power station.
- Transformations in Mining Economies CRC established.
- Latrobe Valley, Hunter Valley and Illawarra Region were selected to become hydrogen hubs.



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