

Ensuring a Just Transition: United Kingdom, Germany, and the Netherlands

Case Study 25. Lessons from the United Kingdom, Germany, and the Netherlands

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Evidence from previous structural transitions away from coal reveals several key issues and approaches that are decisive in determining the socioeconomic impacts of these transitions. Although insights are collected and organized in different ways across the literature, there is a good degree of convergence on high-level lessons and approaches. These are outlined here with reference to ongoing coal transitions in the United Kingdom (on track to phase out by 2024), the Netherlands (by 2030), and Germany (by 2038).

Lesson 1. Declining Employment in the Coal Sector Is Unavoidable, Driven as It Is by Multiple Factors and Not Just the Result of Environmental Policies

Historical and present-day coal transitions are not solely the result of policies targeting the coal sector. Rarely motivated primarily by environmental concerns, they are more often driven by other factors, including the following:

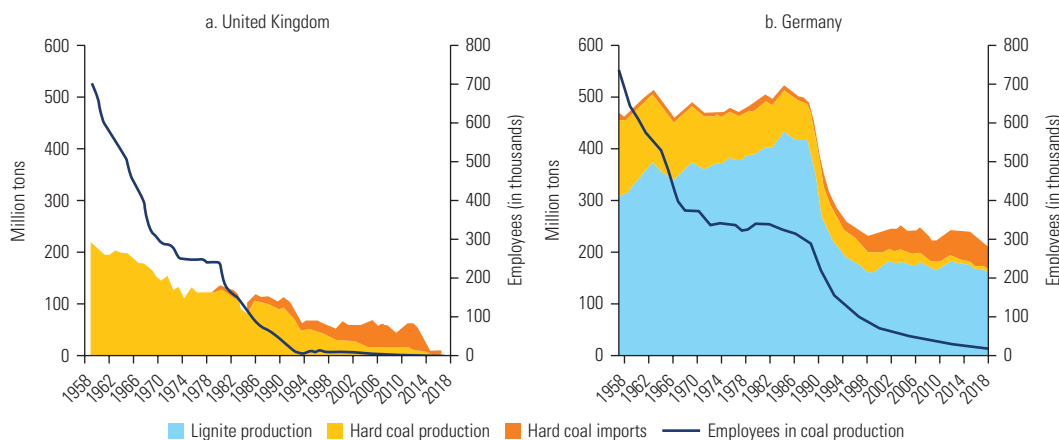
- The declining performance of domestic coal industries, especially where subsidies or other public support are rationalized or removed, or where global trade dynamics shift
- The declining competitiveness of coal compared with other energy technologies—historically, oil and gas; currently, renewables—especially where market rules, procurement, or other institutional factors select for least-cost options
- Economic transitions that lead to offshoring some industries, reducing energy or coal demand and employment shifts from primary to secondary and tertiary sectors
- Gains in efficiency, mechanization, and automation, which can change the structure of the coal sector, especially in terms of final energy demand and employment

These drivers lead to declining employment in the coal sector, even in cases where coal production and use increase. So, declining employment in the coal sector is not only driven by environmental or climate considerations. It is something to be expected, and planned for, in all possible scenarios.

Lesson 2. Well-Managed Coal Transitions Have Lesser Short-Term Impacts and Can Avoid Long-Term Effects

Even when accelerated, coal transitions typically take decades, with older, poor-performing, or economically unviable mines and power plants closing first. Without proper planning and policies to facilitate the transition, shocks can lead to volatile sociopolitical conditions, and coal regions ultimately suffer economic and social decline. The “unmanaged shock” of the British coal transition provides examples of both risks: first, with the dramatic mining strikes and industrial disputes in response to coal closure plans in the 1970s and 1980s; and second, in the long-term negative impacts in former coal communities, which continue to suffer lower job density, worse health outcomes, and higher unemployment, deprivation, and depopulation than the national average (Brauers, Oei, and Walk 2020). At the other extreme, the “managed delay” approach of Germany’s ongoing 60+ year coal decline (figure 3.24)—with its protectionist policies and public subsidies to the sector—was much more expensive. The German parliament estimated that just the phaseout period from 2006 to 2018, during which hard coal but not lignite was phased out, cost an estimated €38 billion, but the socioeconomic impacts have been better (Oei, Brauers, and Herpich 2019). The Dutch 10-year coal phase-down, by contrast, shows that a well-planned transition does not have to have severe long-term adverse impacts or high costs, although the sector was relatively small and the transition was aided by significant natural gas availability. But the Dutch adjustment was also well planned, with substantial support for workers who lost their jobs. As such, it was supported by the trade unions and, for the most part, went smoothly.

FIGURE 3.24 Coal Production and Employment in the United Kingdom and Germany, 1958–2018



Source: Brauers, Oei, and Walk 2020.

Note: The United Kingdom phased out coal production in around 30+ years, while it took Germany 60+ years, despite similar economic conditions.

Lesson 3. Long-Term Policy Package Approaches, Developed with Key Stakeholders, Underpin Successes

There are large benefits to starting coal transition planning early, before significant negative impacts are visible. This can include early efforts to gradually reduce coal production and consumption to smooth the transition, prevent lock-in effects and reduce stranded asset risks, and favor diversification (thus avoiding industrial concentration). Successful strategies also tend to involve policy packages that combine structural reforms with more targeted support. For example, structural policies may be geared toward increasing resilience to shocks—such as improving access to financial instruments and borrowing; strengthening social safety nets, critical infrastructure and related services, and health care; facilitating greater labor market flexibility and mobility; and creating alternative employment by incentivizing economic innovation and diversification. Targeted policies aimed at affected workers, such as early retirement packages or financial and reemployment support, can exist alongside broader community or regional level initiatives, such as skills training, investments in human capital, local economic development programs, and environmental regeneration.

A key lesson is the importance of human and economic development interventions, as opposed to simple compensation mechanisms, for managing longer-term impacts. Using this approach ensures that coal transition planning can be part of or a catalyst for regional and national socioeconomic development plans, including attracting financing. Common elements include investing in and putting measures in place to improve infrastructure; developing policies and regulations to attract new businesses, education, and skills programs; supporting research and development; and expanding soft location factors in mining regions—such as tertiary education institutions and cultural, leisure, and natural infrastructure—to attract the inward and prevent the outward migration of people, business, and investment (Diluiso et al. 2021).

Local ownership of, participation in, and early mobilization for policy design and implementation are also important. Local economic development and diversification are key, and policy design needs to respond to local needs and wants. Economic structures in coal regions are often concentrated around coal and related industries, and coal tends to be important culturally. Inclusive processes; local leadership; and mobilizing public, private, nongovernmental, and other actors can help develop locally relevant and responsive transition plans. Building consensus around the need to transition and developing policies that are guided by community needs and visions of an attractive alternative contributes to political acceptability. In Germany's Ruhr coal region, for example, the transition was made tangible by transforming previous industrial sites into landmarks or cultural sites, marking a break with the past and unveiling a more forward-looking vision for the region while still maintaining a distinct local identity, in addition to extensive training and reskilling for renewable energy jobs.

Other initiatives included opening universities, expanding the education system, and improving transport infrastructure.

Activating local stakeholders can also help with implementation. For example, coal companies can provide skills training and jobs transition support; local government, unions, or community groups can coordinate dialogue processes; and local business initiatives can collaborate to create alternative or diversify employment opportunities—for example, by repurposing coal plants or pivoting production or services to an alternative industry. Institutional capacity support may also be needed to ensure local actors can, and are incentivized to, fulfill these functions. In the Ukraine coal adjustment, which is slightly different from a coal transition, employment was reduced by one-third in just four years (1998–2002) without any major sociopolitical backlash. In this case, strengthening coal industry management by introducing commercial and operational plans and management contracts helped improve governance capacity, accountability, and acceptability. Other success factors included stakeholder engagement and reemployment support.

Gender dimensions can be mainstreamed for more inclusive outcomes. When it comes to specific support for workers, it is worth noting that many indirect jobs are also affected. Policies that only target miners may contribute to excluding and disadvantaging the female workers who rely on the coal sector. There is also some evidence that job transitions might contribute to crowding out female workers when competition for limited jobs increases. For example, before Romania restructured its mining sector, women accounted for 16 percent of the workforce; seven years later, this had reduced to just 7 percent. Gender mainstreaming in policy development can help ensure gender-inclusive transitions and economic development pathways. Policies that include psychological health and support for households or family members are other gender-sensitive approaches.

Lesson 4. Environmental Rehabilitation and Regeneration Are Key Enablers of Alternative Economic Development

Coal mining, power generation, and related industries cause significant environmental degradation that can limit the potential for alternative economic activities, such as farming or tourism. Communities living in coal regions can experience long-term impacts of such environmental pollution—including negative health impacts, poor water quality, soil contamination, and safety issues—long after the industry has left. Historical experiences suggest that this element of coal (or other industrial) transitions is not always adequately planned for, hindering the longer-term economic renewal of former coal-dependent regions. As well as strengthening regulations and enforcement mechanisms (including clearly establishing “polluter pays” mechanisms in mining licenses to create

appropriate incentives), earlier and more progressive rehabilitation efforts can ensure environmental legacies are addressed while coal mining companies are still present.

Lesson 5. Nationally Coordinated Fiscal Support Plays an Important Role

Bottom-up and locally led approaches are important, but a successful coal transition requires significant national-level support and coordination. Considerable resources are needed for sectoral adjustments or transitions, and in most historical cases (primarily from the EU), national governments have had to cover them, as local resources have been insufficient and local fiscal capacity was eroded by the economic impact of the coal transition. A full cost-benefit analysis needs to include the cost of direct and hidden coal sector subsidies, and the costs of environmental and public health externalities from coal mining and combustion, which are typically several magnitudes larger than the direct economic benefits of coal use (or the fiscal costs of the coal transition). Countries can use carbon pricing, levies, taxes, and other tools to compensate for these costs and raise revenues to pay for the coal transition. National coordination is especially important in this regard to ensure that raised funds are appropriately directed and fully utilized.