Briefing

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Industrial decarbonisation strategy – Union priorities

Overview

The forthcoming Industrial Decarbonisation Strategy presents a critical opportunity to revitalise and futureproof key industrial sectors and drive a transition towards thriving and internationally competitive production in the UK. On the other hand, decarbonisation measures taken without a view to future-proofing good jobs can cause significant damage to workers' livelihoods and local economies. The government has set out a commitment to decarbonisation without deindustrialisation.[1] To bring this into practice, good jobs and worker participation in decision-making must be prioritised.

This briefing sets out our recommendations to use the industrial decarbonisation strategy to leverage a rapid and just transition across industry, covering:

- Making government support conditional upon companies reaching **Just Transition Agreements** with their workforce
- **Business models for decarbonisation** that include both a) broad measures that work across sectors, including for SMEs and b) targeted measures for cornerstone foundational sectors. In particular we consider:
    - Power pools to enable fixed low electricity costs for energy intensive industry committed to decarbonisation and a just transition
    - Underwriting of Power Purchase Agreements (PPAs) to facilitate and derisk contracts between generators and industry
    - Carbon Contracts for Difference to stimulate decarbonisation in hard-to-abate sectors and sites
    - Support to small and medium enterprises to ensure they are able to access the finance they need to decarbonise.
- **Direct public investment** in key sectors such as steel through the National Wealth Fund
- A streamlined process for **grid connection upgrades** for energy-intensive businesses that considers impact on jobs and communities in connection prioritisation.
- Use of **additional levers** such as
    - Use of procurement guidance to support a pipeline of work for UK manufacturers of 'green' materials like steel and cement.
    - Conditionality on R&D funding such that subsequent commercialisation of new decarbonisation technologies takes place in the UK.
    - Protections against asset stripping to encourage long term investment and prevent sudden and unjust job losses

Just Transition Agreements

Offering workers a genuine role in decarbonisation planning is essential if the UK is to deliver a just transition. The recent mass redundancies at Port Talbot steelworks and inevitable local economic damage that will be experienced for years to come could have been entirely avoided if planning

[1] https://www.jonathanreynolds.org.uk/2023/10/13/my-speech-to-labour-conference/

was done well in advance, and the workforce was properly involved throughout the process. There have been examples of collective planning between companies and workers that have effectively delivered decarbonisation transitions (see Box 1), even facing the most difficult transitions (such as the transition of >400,000 coal mining jobs in Germany without a single compulsory redundancy). We must take stock and learn from the events at Port Talbot to ensure that decarbonisation is something that happens 'with' and not 'to' industrial workers and their communities.

The government must take the lead on this front to embed just transition principles directly into policy design in order to incentivise companies to take pre-emptive action to involve the workforce in decarbonisation planning. The priority ought to be to future-proof sites and jobs wherever possible. But where a reduction in the workforce is foreseen, workforce involvement in planning is likewise essential.

We propose that one powerful way to achieve this would be to require companies receiving any form of government funding to sign a Just Transition Agreement (JTA) with their workforce. The core aim would be to involve workers in decarbonisation planning such that existing sites and the jobs they support are futureproofed through taking early and decisive action to decarbonise.

The form of JTAs could be guided by templates (e.g. differentiated based on project size)[2], involving standardised terms to be developed in collaboration with unions, though likely covering the below:

- Support for worker voice, including trade union recognition and openness to collective bargaining, for example establishing a Just Transition Committee with union representation and decision-making power
- Commitment to no compulsory redundancies
- Funding for training and paid time-off for workers to upskill or transition into alternative jobs where desired
- Commitment to redeployment support, co-ordinated job transfer schemes & priority for vacancies, in the event of future site closure

As well as JTAs signed with the workforce, companies in receipt of support should also be required to demonstrate the following job quality criteria through transparent and regular reporting:

- Pay rates should be consistent with existing nationally negotiated rates. Where nationally negotiated rates do not already exist for particular roles, these should be encouraged.
- Investment into skills including a 'good' apprenticeship & upskilling training, including commitments on numbers of apprentices per total staff number.[3]

[2] For example drawing on US Community Workforce Agreements/Community Benefit plans https://www.americanprogress.org/article/how-project-labor-agreements-and-community-workforce-agreements-are-good-for-the-biden-administrations-investment-agenda/

[3] This could be structured as staff to apprentice employee number ratio requirements, e.g. akin to the recent agreement secured by GMB union requiring an 8:1 staff to apprentice ratio at Hinkley C, or requirements for proportion of labour hours completed by apprentices; such as 10% of labour hours under Canada's Red Seal investment tax credits (ITCs) and rising to 15% under the US Inflation Reduction Act

Box 1: Closure planning and workforce redeployment at Ratcliffe-on-Soar coal fired power station. Source: TUC[4]

GMB, Prospect and Unite worked closely with Uniper to plan and manage the impact of the site closure on the 154 workers on site. Four years ahead of the eventual closure in September 2024, representatives from the recognised unions together with Uniper set about planning and negotiating for a solid transition plan for the entire workforce. This involved a coordinated process to identify new jobs for workers to move across into, backed up by funding and support for workers to reskill, retrain and find new high-quality jobs. The result was a closure that did not require any compulsory redundancies.

Whilst priority for industrial decarbonisation should be the retention and futureproofing of existing sites, Ratcliffe presents a useful example of good practice in terms of worker involvement in a transition process, highlighting that positive outcomes for both workers and employers are achievable when employer-union collaboration is proactively pursued.

Business models for decarbonisation

Addressing high energy prices and the existing lack of a clear business model to fund decarbonisation measures will need to be central priorities of the industrial decarbonisation strategy. The technological routes for decarbonisation will depend on the specific sector, site, location etc: government support should enable businesses to pursue a viable route that supports the future viability and competitiveness of the business, retention of its value chain, and future-proofing jobs.

Policy should therefore be designed to enable the flexibility to self-select decarbonisation pathways that best suit site context, and to guide the market towards options that most effectively deliver on net zero, competitiveness and jobs. For example in the steel sector, trade unions have been advocating for a brownfield green H_2 directly reduced iron (DRI) and electric arc furnace (EAF) route rather than EAF-only due to the significant jobs, value chain and (at least in the near term) emissions benefits associated with building green primary ironmaking capabilities within existing steelmaking sites in the UK. It is beyond the scope of our contribution here to review options for particular sectors.

In developing these schemes, the following risks should be addressed:

- Companies may seek funding for upgrades that they could easily fund themselves
- Companies could set out a decarbonisation plans that don't involve the workforce or future-proof jobs
- Smaller companies may not have the resources and skills needed to put together a comprehensive decarbonisation plan.

Government already has a suite of policy levers for delivering some decarbonisation measures (Hydrogen Business Model, Industrial Carbon Capture Business Model, Industrial Energy Transformation Fund among others). There is a significant body of pre-existing research into alternative options undertaken inside and outside government. We do not attempt to review this full suite of existing policies, nor every proposed option for additional policies. Instead we outline a few prominent proposals we consider promising, and how they might be shaped to deliver on jobs.

[4] https://www.tuc.org.uk/blogs/last-uk-coal-plant-closes-and-successfully-redeploys-workforce

In our review, we consider how to address the above risks, notwithstanding a broader recommendation to involve trade unions in the development and implementation of mechanisms to create and secure good work in the context of any schemes taken forward.

Power pools

For businesses where electrification is a preferred route, we believe it is worth considering the 'Green Power Pool' concept proposed by UCL academics and the Aldersgate Group[5], which carries the following benefits in particular:

i) Potential to deliver low fixed energy prices[6] without high public cost due to the circumvention of the wholesale market
ii) Potential for near-term impact through redirecting sales of electricity from existing CfD generators to targeted consumer groups, without significant contractual changes.

The UCL proposal[5] suggests industrial consumers as priority beneficiaries[7], and also identifies potential suitability for consumers who are contributing to reduced fossil fuel dependence through electrification.

This proposal carries the potential to be a powerful lever for just transition within energy-intensive industry, through introducing the following eligibility criteria for industrial users benefiting from the scheme:

- The existence of a Just Transition Agreement signed with the workforce, adhering to the content outlined above;
- A net zero plan, outlining commitments to decarbonise operations (with minimal reliance on offsets). This should be structured so as to not disadvantage SMEs, for example involving a preliminary commitment upon entering the scheme to develop a plan within e.g. 6 months, and access to resource to support its development for SMEs (See Box 2 for an example of decarbonisation planning support for SMEs in France).

The Low Carbon Contract Company (or other administering body) should have the mandate to regularly review progress and adherence to the above and withdraw rights to participate in the case of non-adherence.

The above could form the basis for an electrification business model, though shouldn't be accessible only to consumers opting for electrification as a route to decarbonisation (i.e. industry should be able to access cheap electricity whilst also pursuing other forms of decarbonisation).

Box 2: Bpifrance decarbonisation planning support for SMEs

France's public investment bank, Bpifrance, offers support to SMEs to develop detailed decarbonisation roadmaps, as well as sector-specific market diagnostics and ongoing advisory support through the implementation phase. This goes significantly beyond the energy audits and

[5] https://www.ucl.ac.uk/bartlett/sustainable/sites/bartlett_sustainable/files/navigating_the_energy-climate_crises_working_paper_4_-_green_power_pool_v2-2_final.pdf
[6] Technically 'assured' rather than 'fixed' because would fluctuate to reflect weighted generation costs as new renewables introduced – expected to decline slightly over time and fluctuate within a small range.
[7] Suggesting a potential classification as eligibility for the Energy Intensive Industries Exemption Scheme, which in 2021 accounted for 9.9 TWh of electricity demand, 45% of the electricity produced under CfDs.

feasibility studies offered under the UK's Industrial Energy Transformation Fund (IETF), in terms of level of detail and continuity of support. Introducing a similar scheme in the UK (potentially delivered through the National Wealth Fund) could help SMEs overcome resourcing barriers in identifying decarbonisation pathways, understanding market dynamics and throughout implementation.

Underwriting PPAs

Whilst the aggregation of consumers and generators as well as the ability to buy and sell from the wholesale market under the power pools concept hedges risks of default on both sides, the underwriting of bilateral PPAs represents an alternative or additional opportunity for the government to support reduced electricity costs for industry.

Under this proposal the government (potentially via the National Wealth Fund) would essentially become the 'buyer of last resort'. The government could play an active role in facilitating PPAs between generators and industry, for example setting up a streamlined brokering service and actively matchmaking between parties to target sites that are particularly exposed to high prices and/or at risk of closure and job losses. To deliver rapid impact on energy prices this proposal would initially rely on existing renewable generators but with the aim of financing new schemes, and potentially onshore and solar generation that would not otherwise be captured by the current CfD scheme.

The Green Alliance briefing sets out the potential of PPAs to support the steel sector where Electric Arc Furnaces are used.

Sectoral Carbon Contracts for Difference

Carbon Contracts for Difference (CCfDs) may be a useful instrument for sectors that face high decarbonisation costs and often a range of decarbonisation technology pathways that depend on site-specific context, such as cement, ceramics, steel and chemicals.

CCfDs could be structured with sectoral strike prices that reflect differentiated decarbonisation costs and reduce financial risks associated with investing in electrification, green hydrogen, and in some cases Carbon Capture, Usage and Storage (CCUS). Additional support for particular technologies could be factored into the strike price as a premium.[8]

CCfDs could be funded such as to not substantially burden public spending, for example drawing on forthcoming Carbon Border Adjustment Mechanism (CBAM) revenue, or green bond issuance / alternative debt financing via the National Wealth Fund.

Germany has already announced a pilot CCfD scheme as part of its broader *National Hydrogen Strategy* and its *Climate Action Program 2030*.[9]

As above, eligibility to participate in any CCfD scheme should be conditional on the existence of a signed Just Transition Agreement with the workforce.

[8] https://climatestrategies.org/wp-content/uploads/2021/03/Carbon-Contracts_CFMP-Policy-Brief-2020.pdf
[9] https://www.iea.org/policies/17538-carbon-contracts-for-difference-ccfd-program-for-energy-intensive-industries

Strategic public investment

The National Wealth Fund offers a welcome vehicle for timely and substantial public investment into the decarbonisation of strategic industries. We welcome government's amendment of fiscal rules that allows the NWF to invest at scale without being treated as day-to-day government spending. We also welcome the institutional linking of the NWF to the Industrial Strategy, allowing it to invest in support of developing key growth sectors and their supply chains.

In the near term, it is critical that pledges to invest in sectors relating to industrial decarbonisation are delivered. These sectors are set out below. This will harness the narrowing window of opportunity to allow the UK to become a strong international player in net zero industry, and secure good quality manufacturing jobs into the future. Support for to the steel sector and green hydrogen should involve ambitious direct public investment in key companies, learning from the German model in which the federal (and state) government takes a stake in the company to support it through transitions (for example taking a 25% equity stake in Salzgitter to support their green hydrogen steelmaking transition[10]).

Steel: the NWF can invest strategically in green H2-DRI capacity to retain the ability to produce primary iron in the UK. Port Talbot and Scunthorpe in particular should be targeted for investment, for example in steel recycling capabilities, plate mills for turbine manufacture, and ideally new primary steelmaking capacity.

Green Hydrogen: NWF investment in green H2 could be particularly effective if targeted at transport and storage infrastructure (including within ports), as well as mitigating off-taker risk such as through acting as a buyer of last resort.

In order to deliver for workers, the NWF should have explicit goals on job quality and creation such as the below, as well as strong union representation on its executive board.

- Future-proofing high-carbon jobs, skills and industry through decarbonisation
- Scaling up quality jobs and economic activity in new clean sectors in held-back regions

It should have a mandate to invest into companies that are either:

- Delivering a rapid and just decarbonisation of existing high-carbon manufacturing industries, including automotive and steel (see Just Transition Agreements section above)
- Scaling up new clean manufacturing technologies like green hydrogen production and offshore energy supply chains.

Grid connections

We understand that there is an ongoing review and planned overhaul of the grid connection queue system in order to dramatically reduce wait times and prioritise strategic connections for decarbonisation with new regulations (TMO4+) due to come into effect in January 2025.[11]

To leverage industrial decarbonisation it is crucial that the process for demand side connections is carefully considered, with strategic sites prioritised for early connection. Industrial sites seeking grid connections often represent large employers that are important pillars within local communities,

[10] Aktionärsstruktur | Salzgitter AG
[11] https://www.neso.energy/document/316446/download

and we are already seeing that delay in grid connection is directly contributing to loss of jobs and at times site closure. For example, initial proposals for a transition to EAF steelmaking at Scunthorpe steelworks involved replacing blast furnaces with two EAFs of equal combined capacity, however due to an expected 10 year wait for grid connection, the proposed capacity was reduced by half, carrying risk of significant increase to job losses.

The integration of a social impact criterion into the connection triaging process, in which job retention and creation are factored into prioritisation for new connections, offers the potential to mitigate the risk of closure of important industrial sites due to connection wait times and therefore leverage significant social and community benefits. Similar to the National Energy System Operator (NESO) proposal to incorporate future energy needs through alignment with the forthcoming Strategic Spatial Energy Plan (SSEP), consideration of jobs impacts could be integrated into the 'Gate 2' decision-making stage that dictates queue position.

Additional levers

Below we suggest some additional levers, going beyond specific business models and funding for decarbonisation, which should be used to support the aims of the Industrial Decarbonisation Strategy.

- The forthcoming **National Procurement Policy Statement and launch of the 2023 Procurement Act** in February 2025 – updating procurement guidelines represents a key opportunity to prioritise shorter supply chains and support low carbon and domestic production across foundation industries e.g. in civil engineering projects
- **Conditionality on R&D funding** could be applied so as to provide incentives for projects to be scaled up in the UK, such as setting percentage thresholds for the project's subsequent production to take place in the UK
- **Protections against asset stripping** to encourage long term investment and prevent sudden and unjust job losses, for example by introducing stricter M&A regulations for strategically important sectors like manufacturing, introducing legal worker consultation requirements, and introducing anti-asset stripping clauses that prevent the sale of assets for a certain period following public funding.