



# Agulhas

## Applied Knowledge

### Lessons for a successful transition to a low carbon economy: A summary for policy makers

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## Introduction

In order to reduce carbon emissions at the rate required by the Paris Climate Agreement policymakers have recognized that transformative structural change is needed, across all economies. This change will have to happen at unprecedented scale and speed. All 195 signatories to the Paris Agreement have accepted that specific measures are required if it is to take place.

The challenge for policy makers is how to enable this transition and manage the impact on individuals and communities.

Economies are not static; history provides ample demonstration that economies have always changed and evolved – sometimes abruptly in response to external shocks and sometimes in planned steps in anticipation of changes in technology or global trends.

In many countries the transition to a low carbon economy is already underway or is on the horizon. It is not always driven by climate policy. Concerns about the impacts of pollution on health and productivity, or the opportunity to boost economic competitiveness from electric vehicles and renewables, are examples of other drivers of transition. Governments and society are seeking lessons not only to manage the negative impacts of the transition, but to harness the many benefits.

Transition measures can become the mechanism for workers and communities to speed the exit from a carbon economy, by calling for and engaging in alternative livelihoods. The right structural policy, along with support for communities and workers to plan for the transition, can mitigate negative social impacts, stimulate alternative livelihoods and pre-empt a backlash against such change.

## Methodology and evidence gaps

This assessment provides a high level summary informed by a broad literature review that sought to identify common themes in managing industrial transitions across 26 countries and 11 sectors.<sup>1</sup> The aim was to create a picture of the available evidence and its gaps, and to identify the best examples of transition management.

Transitions have been taking place across different countries since the start of the industrial revolution. Much of the literature relevant to low carbon transitions focuses on the decline of coal mining, we found that while there are a few examples of well-managed coal transitions,

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<sup>1</sup> The literature review is available online at [www.agulhas.co.uk](http://www.agulhas.co.uk)

most coal closures are examples of poorly managed transitions. Evidence from these examples of success tends to focus on the macroeconomic and overall job figures rather than on broader social impacts and improvements.

There are few other sectors and economies that have successfully completed a transition to a low carbon economy, although there are numerous efforts under way which are still too early in the process to evaluate. Given this data gap we broadened our literature review to identify other additional illustrative case studies, alongside the five case studies that had a solid evidence base.

There is weaker evidence on the health and social improvements of well-managed industrial transitions and, until recently, poorer evidence on how well managed transitions can have positive impacts beyond job protection/creation. This is largely because the focus on 'transition' has been about mitigating the negative job loss rather than about harnessing the change for broader benefit. There is much anecdotal evidence to suggest some broad and deep positive impacts, often with ripple effects across economies, but less independent, robust assessment beyond figures about job creation. There is a geographical evidence gap, with an obvious focus on more mature post-industrial economies and much less evidence from middle-income countries currently engaged in transition.

## Case studies

We selected five case studies from a range of examples of the transition away from carbon intensive industries towards cleaner energy sources. Some recent literature by the Institute for Sustainable Development and International Relations (IDDRI) and Climate Strategies has looked at lessons on managing coalmine closures. We went beyond coal to include case studies from other sectors in order to add to this body of evidence. These best examples were selected to illustrate a range of interventions utilised by different actors. We tried to identify the case studies for relatively fast transitions given the current time pressure for low carbon transition.

1. Spain: Revitalising Metropolitan Bilbao
2. North East England: Fostering entrepreneurship in low carbon technology
3. China: Heavy industry to high-tech transition in Shenyang City
4. Germany: Lignite mining to tourism in Lausitz
5. Scotland: Putting the enabling framework in place for transition

## A typology of interventions

The review identified a number of key enablers. The successful management of economic transition requires a package of measures under a broader structural policy approach. This includes economic diversification or stimulation to ensure long-term sustainability. Our review identified a typology of interventions that have been utilised, often in concert, to manage transitions:

1. Early retirement/pension/financial compensation for workers  
*e.g. In Shenyang, China the central government allocated c.\$15bn as an aid package to fund retraining, early retirement and the creation of new public sector jobs*
2. Job retraining and skills development  
*e.g. in Lausitz, Germany the central government created a regional management company which provided 20 000 new jobs for the workforce in decontamination and environmental clean-up*
3. Infrastructure regeneration projects  
*e.g. In Bilbao, the Government of Spain's investment in state of the art transport infrastructure was key to transforming a post-industrial area in decline into a successful tourism industry.*
4. Regional support schemes  
*e.g. In the North East of England a regional support facility was created to invest in five universities in the region to build enterprise capacity. These in turn created new skills, jobs and businesses.*
5. Forums for stakeholder participation and dialogue  
*e.g. In Connecticut, USA a citizen advisory committee was set up to ensure the local community had a say in the future of the area post the closure of a coal mine.*

## Conclusions

This assessment explored how transitions can be better planned for, managed and delivered. The examples identified show the possibility not just of mitigating the worst impacts on workers and communities, but the economic and social opportunities that a well-managed transition brings to regions and economies.

The report has developed a typology of the interventions that can be combined to enable a successful transition. These can be applied across any sector or country. The key is in combining the elements at the right time and with enough support. This support is more than

simply a one-off financial transaction in the form of redundancy payments, but is structured long-term support for the workers and the community in that region. There are examples of how this has been successfully applied in relatively short time periods (5-10 years) but all transitions are ultimately a long-term evolving plan.

It is not enough to simply support workers who lose their jobs during a transition. The broader community, often providing services and ancillary businesses, also needs support, for example with cluster policies to support a particular sector or regeneration and diversification of a region. This is vital to prevent long-term inequality and area decline.

Some sectors will potentially see an overall net increase in job creation, for example in automotive electrification and energy generation, however this cannot mask where there will be inevitable job losses. Some workers will not be able to easily move jobs, or relocate or reskill, and so plans need to be in place for due warning, preparation and financial support. Where redundancy payments were combined with retraining packages, these were more effective than higher total redundancy pay.

Governments that plan in advance for the low carbon transition, ensuring education and training are suited to future and evolving low carbon economies, and regions are supported in diversifying their economies, avoid the negative social and economic impacts *and* their economy is positioned to capitalize on the low carbon transition. Such action can promote transition at the speed and scale required, triggering similar measures elsewhere. Managing low carbon transitions needs to be contextualized to include the wider transition agenda for the future of work, including the broader technological trends, for example in automation and manufacturing.

Stakeholder dialogue is a critical success factor. This includes more formal social dialogue between workers and their unions, employers, and often governments, as well as broader stakeholder processes involving communities and civil society. Both the broader process of stakeholder dialogue, and social dialogue, help to ensure buy-in and transparency, preventing backlash and generating support for the process, not just by the workers who face redundancy but by the impacted broader community, for example the ecosystems of supporting businesses that grow up around an industry, and the social fabric made up of schools, clinics, community centres and hospitals that face potential changing income levels (e.g. from declining industry tax contributions). As a result of union mobilization there are numerous examples of workers in highly polluting industries supporting a just transition to low carbon livelihoods and jobs and taking demands for transition plans into collective bargaining and other negotiations with employers and government. Similarly, community and civil society mobilization can provide the impetus for government planning for transition and investment. Stakeholder dialogue and social dialogue do not just involve consulting workers and communities, but ensuring their active engagement in the process of planning and implementing the transition.

Transition Funds can be used to ease the blow in the short term to prevent workers and their families falling into poverty or ill health, but to be most effective at facilitating a smooth and sustainable transition they must also build the capacity of workers and communities to make the transition on their own terms. This can involve retraining, redeployment and support for alternative livelihood diversification. Transition Funds that are not designed to accelerate a smooth transition risk being used to prop up the status quo, delay climate action, or shift the fiscal responsibility from companies to the state.

Transition to a low carbon economy has the potential to add more value than simply reducing pollution. Transition policy can create dynamic, inclusive, healthy regions, with better work opportunities and thus provide a source of regional prosperity and pride. The obligation to address climate change creates an opportunity to design climate policy in a way that can deliver a source of community regeneration and renewal rather than just prevent loss. Well-managed transitions can result in a revitalization of a region, with enhanced prosperity and well-being by moving away from 'economic lock-in' from high carbon industry.

## Recommendations for policy makers

### *Recommendation 1:*

Policy makers need to factor in transition measures alongside climate policies since the government policy response can significantly affect the outcome of transition. A proactive fiscal or policy approach to sectors and regions that will be most affected by the low carbon transition will enable them to become more productive and prosperous, contributing to economic and social development. Specific transition measures can complement the national policy approaches. These measures may include regional funding and policy to support economic diversification, targeted infrastructure investment, training and education, social protection, and ensuring adequate pension and redundancy provision.

### *Recommendation 2:*

Policy makers should find ways to support the participation and stakeholder dialogue process given that communities and their representative organisations (such as unions, faith and community groups) have a critical role in discussing, co-creating and then implementing the transition vision. With communities and workers engaged in the transition, the whole process can be accelerated. Without this support there is potential for backlash that can slow down or disrupt the transition process.



Specific government established Transition Funds can also provide grants to create the capacity and resource for communities, businesses and workers to proactively accelerate the move away from fossil fuel based jobs and industries, rather than to just adjust to decline.<sup>2</sup>

*Recommendation 3:*

Government intervention may be required to ensure that businesses or industry make a contribution to the costs of transition proportionate to their impacts. Heavy polluting industries have a responsibility to pay for the costs required for the transition to low carbon economies, and often do either voluntarily and directly, or involuntarily or indirectly. However, some companies may opt to go bankrupt, or foreclose, without fulfilling their financial or environmental obligations to the workers or local community. Companies can be required by governments to make payments into specific Transition Funds, for example, or payments for specific measures such as land restoration and clean-up, and/or towards pensions and redundancy for workers.

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<sup>2</sup> We note that the need for transition measures was accepted by all the governments who were United Nations Framework Convention on Climate Change (UNFCCC) signatories in Paris in 2015. If applied and implemented, the measures will also support delivery of SDG 8 - Decent Work for All and SDG 13 - Climate Action. Policymakers can draw upon on the ILO 2015 Guidelines for a Just Transition and the work of the Just Transition Centre, amongst others.

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