



The Long and Winding Transition Road

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The journey to net-zero requires action across all aspects of the economy; implementing large-scale solutions, phasing out certain high-emission activities promptly, significantly reducing emissions in other areas, and deploying some appropriate governance and incentive schemes. Successfully navigating these pathways demands a greater degree of collaboration and understanding between all stakeholders, especially capital providers and users to ensure the optimum mix of investment for a net-zero world.

At Natixis CIB's 2024 Green Summit, a series of sessions addressed the theme of Net Zero and Transition among other key topics.

Here, we take a deeper dive into the Transition to Net Zero.

Transition: From Planning to Delivery

Creating a transition plan can be challenging. For those just beginning in their journeys, the process may seem overwhelming and complex, and the cherry on top? The credibility of your organization depends on it.

Hosted by **Julie Raynaud, Green Finance Expert at the Institut Louis Bachelier**, **Samuel Mary, Senior Vice President and ESG Research Analyst at PIMCO**, **Ira Poensgen, Interim Team Lead for the Transition Plan Task Force Secretariat E3G**, and **Romain Poivet, Climate and Energy Lead at the World Benchmarking Alliance**, discussed how companies can write good transition plans amongst all the guidance that exists today, what investors are looking for when assessing transition plans, and much more, as they delved into the importance and intricacies of creating and implementing a credible transition plan.

Transition planning – more than just a buzzword?

While the panelists unanimously agreed that “transition planning” is indeed a buzzword today, opinions diverged on the depth of meaning behind the term.

For Ira Poensgen, rather than being a mere repackaging of concepts that existed previously, the concept of transition planning addressed/addresses a gap in the landscape.

For Romain Poivet, before the term existed, many market participants were trying to avoid the concept of transition planning. Today, everyone is talking about it and transition plans are conceptualized and integrated into a company’s strategy – which didn’t happen previously.

With so many options available, how should companies choose a framework?

There are a great number of actors involved in the transition plan definition framing. From the standard setters and framework developers who work to publish guidelines that help organizations and financial institutions develop their own credible transition plans, to the organizations work on methodologies which help stakeholders assess the credibility of the corporate or financial institutions transition plan and processes. And not forgetting, the organizations that work on the building blocks that feed into wider transition plan – such as scenario development.

Credibility is a concept that is central to the concept of creating a transition plan. But with a significant number of guidelines existing today, how can a company be sure that it developing a plan that will stand the test of time – if that is even possible?

The good news is that following an ‘explosion’ of voluntary frameworks in recent years, there has been consolidation, which has been helpful for actors looking to choose their frameworks.

One such taskforce that looked to consolidate existing advice and guidance is the Transition Plan Taskforce – or the TPT – a public-private partnership launched in April 2022 to establish the gold standard for

transition plans globally. (Read more about the TPT here: <https://transitiontaskforce.net>) Ultimately though, the strategy for a transition plan is unique to each company, and a process that must be undertaken in-house. Tools such as the TPT (now incorporated by the IFRS-ISSB) act as guidance for analysis.

While a lot of ground has been gained on the disclosure aspect, there is still work to be done to align transition plans across different use cases, and to harmonize prudential elements.

What to keep in mind when creating a transition plan?

Transparency is king!

Panelists advised that transparency is the winning ingredient when it comes to creating a transition plan. With plans depending on so many interdependent, internal and external factors (policy, supply chain, etc.), the reality is that it is probably not going to be possible to create a transition plan that will remain the same for the next 5 years – and that's Ok! As long as you are transparent in your communication. Realistically, if you wait until you have all the answers, it will be too late.

To help address this, the ATP-Col – Assessing Transition Plans Collective – was launched in 2023. A working group comprising experts from some 40 organizations, ATP-Co; aims to collectively develop a consensual framework with guidance on how to assess companies' transition plans' credibility.

How do transition plans help investors?

Transition plans serve as valuable tools for companies to articulate their objectives, commitments, actions, and advancements. They also outline how a company plans to sustain its financial performance and competitiveness throughout the transition process – and here again, transparency is key.

For investors, they are able to read into the likelihood of a company meeting its targets – one example being GHG emissions targets – and how

that goal might be dependent on policy or other external factor, to come to fruition. Transition plan data also helps investors differentiate leaders from laggards informing their decision-making process.

Is transition happening today?

The picture today remains fairly disrupted. Some companies are transitioning, others are not. Some are moving fast in the process, others are not. Today, those who are part of the solution remain in the minority, compared to the numbers that will need to transition in the coming years. Until companies systematically integrate transition planning as a metric in their performance management and until there is an accountability system in place, it will be hard to push the narrative in a meaningful way.

The Managed Phase-Out of Fossil Fuels

The rationale for the phase out of fossil fuel related facilities and equipment is well known, but implementation brings challenges. Today, we are not yet doing at scale what is necessary when it comes to decommissioning or the ‘greening’ or brown assets, and if we wait for all brown assets to reach the end of their planned lifetime, we will overshoot net zero targets.

Oftentimes, discussions around managed phase out can be vague. To bring clarity to the narrative, **Augustin Honorat, Senior Advisor Energy**, and **Nicolas Mardam-Bey, Senior Loan Officer at the European Investment Bank (EIB)** discussed how real-life situations match Managed Phase Out frameworks, in a session hosted by **Cédric Merle, Head of Center of Expertise & Innovation at Natixis CIB’s Green and Sustainable Hub**.

Case Study: Hazelwood Australia

Formerly CEO of Engie for Australia and New Zealand, Augustin Honorat, shared his personal experience from the decommissioning of the Hazelwood coal plant and rehabilitation of adjacent mine in Victoria, Australia.

Following a decision in 2016 by Engie to phase out coal globally, the decision to decommission Hazelwood followed shortly thereafter, with a lead time of 5 months.

At the time, the plant had some 750 people employed either directly or via contractors, generated 14 TWh of electricity per year – equal to approximately 25% of the state of Victoria’s power consumption – and produced approximately 16 mn tons of CO₂ per year. To illustrate the enormity of this figure, that equates to the carbon footprint of both L’Oréal and LVMH combined.

The rationale for the retirement and decommissioning of the 1964 power station was threefold: First from a safety perspective, secondly it was economically unviable due to maintenance investments, and thirdly, the environmental impact.

Ultimately the project from start to finish took 4 years for the power plant and is still ongoing for the mine rehabilitation.

Planning is Key

Clearly with a decommissioning project such as this, planning is key to success. Not only did this require navigating what was the largest demolition project in Australia at that time, but decisions had to consider the social and employment impact for the workforce and the community, stability of the mine during the decommissioning, replacement of the power reduction as a result of the closure and, regulatory considerations.

To do this three key workstreams were deployed: Stakeholder Management, Demolition / Rehabilitation (technical aspects), and New Asset Development.

It's Never Too Early for Stakeholder Engagement

Through the three workstreams, plans were put in place – to fund and manage the project, to demolish and redevelop the site, to retrain/repurpose and redeploy workers, among many other considerations, with the objective to ultimately hand the land back to the local government.

Along with lessons learned and a new appreciation for the specific skill set required to run a decommissioning project, one aspect of the project clearly stood out, stakeholder management.

While many of the consequences of closing the power station had been foreseen, others had not been anticipated, even the most anecdotal ones. For example, a nearby lake used by the power station for cooling purposes had been used by local residents to house tropical fish, as the temperature of the lake increased by several degrees due to the cooling processes used. When the facility was decommissioned, the lake temperature dropped back to its “normal” level, which unfortunately was too cold for the fish, which perished.

But the biggest impacts were probably the ones related to electricity prices in the region which skyrocketed after the closure (+85% year on year), leaving many consumers angered and feeling caught out.

Since then, Australia’s regulation has evolved to increase notice periods, to ensure that topics such as this are well conceived before projects move ahead. This lesson also benefited the whole industry as, since then, many more retirements of coal-fired power stations have been announced together with holistic plans inspired from Hazelwood.

Ultimately a success, Hazelwood is the first retired coal-fired power station to host a battery storage system in Australia, as a concrete symbol of the energy transition.

Case Study: European Investment Bank

Banks and Financial Institutions have the potential to facilitate transition by fostering conditions conducive to change. As part of this, an increasing number of financiers are actively exploring strategies to accelerate the retirement of existing coal plants, extending beyond the exclusion of coal from direct financial support.

The European Investment Bank (EIB) is an active player in supporting a fair transition, ensuring that phase out projects have minimal impact on the livability of communities nearby.

The Braunkohlesanierung Lausitz Project

The EIB provided financing of EUR 200mn as part of what was the German government's biggest environmental project at the time, to rehabilitate, stabilize and remediate former lignite (brown coal) mining sites in the Federal State of Brandenburg, from 2013-2022.

The funding was provided for basic rehabilitation and ground stabilization; - flooding of former pits and works related to groundwater level management; - and recovery and additional development to return areas to economic use and productivity, including the creation of recreational lakes and the greening of spaces.

Benefits for Today's Changing Environment

The project enhanced water retention capacity, thereby lowering the risk of downstream flooding. This provides a climate adaptation benefit, as the increasing risk of flooding is linked to the effects of climate change in the region. During periods of heightened risk, floodwater can be redirected to the mine lakes, utilizing their storage capacity to prevent flood damage downstream, as evidenced in May 2013.

Moving up the Value Chain – Green Enabling Projects and Quantifying their Avoided Emissions

To date, sustainable finance markets have primarily focused on activities with direct environmental benefits, ignoring the need to route capital into upstream or downstream value chains. Yet, a number of key enabling equipment, materials or activities are necessary for the development or efficient management of end-use green projects.

Earlier this year ICMA published a Guidance Document (access here: [ICMA: Green Enabling](#)) for the structuring of Green Enabling Projects' sustainable financing. This encompasses both the induced and avoided emissions dimensions, as well as the management of related environmental and social (E&S) risks.

Manuel Coeslier, Lead Expert, Climate and Environment, at Mirova, was joined by **Pierre Collet, Global Lead Footprinting at Quantis**, **Felicity Gooding, CFO at Vulcan**, and **Aurélien Schuller, Climate Strategy Director at Schneider Electric**, to discuss the level of transparency we should expect regarding the actual end use of enabling activities, how we can ensure that a project will contribute to long-term environmental benefits, whether avoided emissions is the “golden metric” for enabling activities, and how to properly assess the mitigation of environmental and social impacts.

The Most Important Parameters to Measure Avoided Emissions

When defining avoided emissions, a company must consider that the concept of avoided emissions is part of a larger shift toward net zero, together with induced emissions and offsetting - such as investing in renewable energy, reforestation, or carbon capture.

Avoided emissions looks at actively reducing emissions beyond a company’s value chain – through the development of new solutions. What is important to note is that this is not a way to offset emissions, nor is it a direct contribution to a company’s own target, but rather an action that drives broader behavioral and market shifts.

When looking at avoided emissions, it is important to note that the reference scenario is central but constantly moving. Avoided emissions are subject to the maturity of technologies and are not static, but they are likely to reduce over time as technology improves and becomes more mainstream.

An Innovative New Approach

In its quest to avoid emissions, Vulcan Energy is reimagining lithium mining process, with a plan in progress to build the world’s first carbon neutral, integrated lithium and renewable energy business to decarbonize battery production. The financing of this project is the first green enabling loan

(compliant of the ICMA recently published guidelines) with the help of Natixis CIB as the Green coordinator.

The company's Life Cycle Assessment estimates a negative 2.9t of CO₂ emitted per tonne of lithium hydroxide to be produced from the project. Due to the development of a unique mining process, impact on the land will be minimal, no fossil fuels will be used at any stage of the process and minimal water will be used.

With production in Germany and the end product being supplied to EV and battery producers in Europe, the entire supply chain will be just 130km long, drastically reducing potential impact and resulting in avoided emissions of 1.3mn tonnes per year.

An important consideration for Vulcan throughout their project has been to ensure transparency with all stakeholders.

A Staunch Supporter

Schneider Electric was one of the first companies to be reporting avoided emissions publicly and has been reporting on the metric since 2015 and has set an ambitious target to deliver 800 megatons of avoided emissions over the period 2018-2025.

Avoided emissions are a complementary indicator to the GHG inventory of the company, meant to illustrate that the company's climate impact is twofold: reducing its company-wide carbon footprint, while increasing avoided emissions. The company's Variable Speed Drives are a key example of this, generating savings on electricity consumed by motors by regulating their speed and rotational force. These could be used by companies with variable electricity needs, thus adapting to consumption needs and avoiding unnecessary emissions.

Usage, Comparability, and Standardization

Currently there is no single disclosure standard for avoided emissions. For Vulcan, to date, they have approached the topic with a view to maximum transparency for their stakeholders. Where possible they

compare themselves to others in their industry to demonstrate how they are positioned in comparison and would welcome standardization.

As a long-time reporter of the metric, Schneider has noticed a recent uptick in positive momentum towards harmonizing and standardizing data on the metric.

Understanding not only the desire but need for a common database of emission avoidance factors Quantis is currently working on a standardized and transparent database of avoidance factors which should make it possible to quantify, compare and audit the emissions avoided by companies and projects, and thus encourage the redirection of financial flows towards assets that promote decarbonization. The database, which is designed to be the missing piece in the avoided emissions puzzle, builds on existing frameworks and disclosures, to try and ensure that everyone is working towards the same goal. The database should be operation from March 2025.

Common But Differentiated Transition Patterns

Expectations of a straightforward transition globally overlooks the complexities of sustainable development, energy security, affordability, and poverty alleviation across geographies, which sometimes tend to take priority over the energy transition.

We know now that transition will be multidimensional, with different starting and end points for different geographies. Using a one size fits all transition approach might not be appropriate and we might need to recognize that although all transition trajectories should be science-based, levers and pathways will have to be different.

The panel session led by **Thatyanne Gasparotto, Green & Sustainable Financing Solutions, Cross Asset Originations with Natixis CIB Americas**, with **Luiz de Andrade Filho, Head of Climate and Environment at the Embassy of Brazil in Paris**, **Pauline Gonthier, Deputy CFO for Agence Française de Développement**, and **Justine Leigh-Bell, Executive Director with Anthropocene Fixed Income Institute**, sought to address whether global transition is the “same race with different speeds?” Or are transition

pathways individual, and therefore location specific? But how do we preserve the common goal?

The IMF estimates that the path to net zero by 2050 will require low-carbon investments to rise from USD 900 billion in 2020 to USD 5 trillion annually by 2030. Emerging and developing countries will require approximately USD 2 trillion of this investment, a fivefold increase from 2020 investments.

As we navigate the world of sustainable finance and try to translate policy actions and commitments into quantifiable transition plans, we look to address how the multidimensional aspect is received by the market and how we will move forward.

Brazilian Taskforce

As part of its G20 presidency, Brazil launched a taskforce on climate change informed by 3 main challenges: Firstly, that the science is much clearer today regarding the vast difference in effects of 1.5 degrees and 2 degrees change, secondly, that policy packages and just transition plans are part of platforms that address different sectors of government, and thirdly – in order to stay at change under 1.5 degrees, there needs to be structural change in the system.

Where most conversations exist in silos, what Brazil sought and succeeded to do with its taskforce, was put all the necessary parties together in one room, with a mandate to address what is necessary to stay below 1.5 degree of change, in terms of action and financing.

Where the taskforce particularly excelled was in sending a clear political signal for the first time regarding the consideration of bringing forward climate neutrality commitments among the G20 countries, to have international economy wide indices for climate targets. They then agreed financial transition planning principles and platforms, to turn the indices into something concrete at a national level. They also discussed the reduction of cost of capital for developing countries, to accelerate transition away from fossil fuels with increased participation from the private sector. And finally, they helped development banks work in partnership rather than in competition, to fund necessary transition activities.

Transition Planning Tools and Guidance

Today, assessing a transition plan remains complex. There is no one single metric and each country has its own journey.

At the Agence Française de Développement, each operation that is financed is first examined within the broad sense of transition, in terms of the 6 dimensions: biodiversity, climate change (adaptation and mitigation), social inclusion, gender equality, governance and economic impact. Then an operation team and an independent team assess and give feedback. The process takes time, but is very collective, qualitative and thorough.

The Role of Fixed Income in Transition

There is huge disparity on views of what transition is, and the pathways for each country. What needs to be more broadly recognized is that transition is happening, the question is more about the speed and scale at which we can achieve it, and the timeframe within which we have to do so.

With USD 130+ trillion at play, the fixed income market is powerful and has a significant role to play, according to Justine Leigh-Bell.

Opening capital flows to emerging market countries is where the greatest impact will take place. For fixed income investors, the ultimate question is the risk involved. Government action, or inaction, on climate change, is going to impact portfolios.

That said, the exporting of the EU's regulation to emerging markets is crushing from a transition perspective, and there needs to be flexibility built-in, with a focus on outcomes to be achieved. Investors need to use their capital to push for that.

A Regulatory Alphabet Soup

In the EU, a lot of regulation being developed. So, how do companies with global mandates navigate the integration of taxonomies and regulations?

For Pauline Gonthier, while she is in favor of regulation, transparency and disclosure, it's clear that to many investors, financing transition means financing green bonds in the EU taxonomy sense of the definition, which could lead to the green asset ratio becoming the driver – given it is easily understandable. The problem? It could lead to a reduction of investment in brown assets – which need investment in order to transition.

To combat this, financial institutions need to be vocal about what they are doing, and how they are financing transition, providing a gap analysis on what green means for an emerging market versus what green means in Europe. In Europe too, more and more, transition is being translated to carbon reduction. But with a mandate to intervene in brown sectors in emerging markets, Agence Française de Développement's carbon footprint may increase in the short term. It's difficult to judge how investors may react if disclosure is simplistic and does not take these factors into account.

Subject to the CSRD, data collection is also a challenging topic, as in many emerging markets, it's difficult to collect the data required, as it is often not produced.

To be successful, nuance and differentiation needs to start trickling down into methodology.