



## INTERVIEW

### ECONOMY-WIDE TRANSITION REQUIRES TO INCLUDE BROWN INDUSTRIES IN SUSTAINABLE FINANCE



**Christa Clapp**  
Research Director, CICERO

**Christa Clapp** leads the climate finance work at CICERO, including climate risk for investors and green bonds. She has 20 years of experience in climate policy and economic analysis. Christa previously held positions at the OECD and the US Environmental Protection Agency, where she earned a National Honor Award Gold Medal for climate policy analysis for US Congress. Christa holds a Masters in International Relations and International Economics from SAIS at Johns Hopkins University, and is a member of the Climate Strategies research network. She is a Lead Author on finance and investment for the IPCC 6th Assessment report.

If sustainable finance is limited to pure play green actors, we are not encouraging an economy-wide transition that is necessary to achieve the climate targets set out in the Paris Agreement. Traditional brown industries need to also be encouraged to play a role in the transition to low carbon, by making efficiency improvements and fuel-shifts that avoid locking-in fossil-based infrastructure. For example, efficiency investments in shipping technologies where clean alternatives are not yet available could be eligible for light green. Battery technology combined with efficient use of fossil fuels could be an important bridging technology for long-haul shipping on the transition pathway.

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**Q1. Why are “irreplaceables” and “hard-to-abate” brown industries key in the low-carbon transition?**

Climate research tells us that all sectors need to be part of the transition to meet the climate challenge. If we do not engage with traditionally brown industries, we will not be able to transition away from fossil to limit the impacts of catastrophic climate change.

**Q2. Should we dismiss the point that Sustainable Finance must remain a niche with only green pure-players? Under what conditions brown industries can be wisely considered as eligible?**

**Q3. How to gauge the “greenness” in the high-emitting sectors without falling into the trap of green-washing?**

CICERO Shades of Green methodology distinctively supports a range of green activities. We use three Shades of Green to how well a green bond aligns with a low-carbon climate resilient future, reflecting the degree of climate risk. It was a deliberate decision to include a range of green in our method – if we were to only focus on Dark Green, we would risk limiting the amount of finance supporting a low-carbon shift in infrastructure.



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Trillions of dollars are needed for infrastructure investments in the next decade, and if we ensure low-carbon climate resilient infrastructure decisions, we could save in damage costs from climate-related disasters. We need financing for all Shades of Green to solve the climate challenge. Light Green can apply to issuers-in-transition that are making emission reductions with good governance, such as climate targets and procedures to measure against those targets, to avoid locking in fossil-based infrastructure, whereas the darker end of the scale applies to solutions that are zero or nearly-zero emissions and address climate resiliency. (Read more about our approach here: <https://www.cicero.green/our-approach>)

**Q4. For green driven investors, what are the key items in screening green bonds issuances from brown industrials, if any? (e.g. Thresholds in terms of energy efficiency gains in %; risks of carbon lock-in; or coherence between the assets meant to be (re)financed through the proceeds and the overall strategy of the issuer)**

Of course, screening green bond issuance from issuers in traditionally brown sectors needs to be done carefully. We evaluate the level of ambition of the planned efficiency improvements against what is needed to move to zero carbon by mid-century, consider the safeguards in place to avoid locking-in fossil-based infrastructure in light of the best achievable technology in the sector and region, and how the green bond supports the overall transition aims of the issuer. Transparency on all of these issues is important for investors to make informed decisions in the face of climate risk.

**Q5. What was or could be controversial / major concerns in issuances from “brown actors”? How to overcome them?**

Green bonds from oil companies are the most obvious controversial example. Key concerns include if the company is really planning a transition to a low-carbon future, and how they will avoid locking-in fossil fuel dependency. In our role as an external reviewer, it is our responsibility to provide transparency to the investor on these issues, and then leave it up to the investor to determine the level of climate risk they are comfortable with.

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#### CICERO Shades of Green

#### Examples



**Dark green** is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Wind energy projects with a strong governance structure that integrates environmental concerns



**Medium green** is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Bridging technologies such as plug-in hybrid buses



**Light green** is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Efficiency investments for fossil fuel technologies where clean alternatives are not available



**Brown** is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

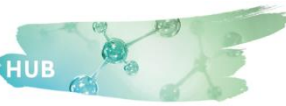


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**Q6. What are the key ingredients for a successful brown-to-green transition at corporate level?**

Strong corporate governance is necessary to ensure that project selection and management are aligned with their ambitions for a green transition. Climate targets and procedures to support the achievement of those objectives within a corporation are important, in addition to environmental expertise and criteria being included in project selection and evaluation. Transparency on all of these aspects, as well as impact measurement, give further confidence that a bond supports a green transition.

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**Q7. What assets or technologies are game-changers and genuinely transformative in the sense they deliver substantial or significant gains? What are the main hurdles when addressing the notion of transition?**

To limit catastrophic climate change, there are five ‘must haves’ or building blocks: carbon capture & storage technology on a widespread scale, high penetration of electric vehicles, widescale renewable power

generation, substantial improvements in energy efficiency across a range of sectors (including carbon-intensive manufacturing of materials such as aluminum and cement), and a strong carbon price signal. In our recent report *Climate Scenarios Demystified: A climate scenario guide for investors* (<https://www.cicero.oslo.no/en/posts/news/scientists-demystify-climate-scenarios-for-investors>) we broke down these building blocks to achieve the Paris Agreement target. There are many pathways to limiting average global warming to 2°C as stipulated in the Paris Agreement, with energy and climate models differing as to how much of each building block is necessary. But we need greater progress in each of these five building blocks to solve the climate challenge.

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