Energy Transition and Reduction of Carbon Emissions

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The energy market is in the process of transition and is moving toward a less polluting matrix that will reduce greenhouse gas (GHG) emissions. Containing emissions of CO2, the largest of the polluting gases (representing 65% of emissions[1]) has become an important objective, not just because of society's demands, but also because the market has recognized the overriding necessity of social and economic development that has permanent and sustainable results.[2]

The starting point for this rethinking of social and economic development under a low carbon economic model is the Paris Agreement, which establishes a target of 2°C as the limit for the average global increase in temperature to the end of the century, holding the increase to 1.5°C in relation to the average pre-industrial temperature. The signatory countries must thus construct long-term plans and strategies so that their investments reflect the aims of the Agreement.

Many major oil companies have announced their intention to adjust the focus of their business, although only a few have put forward firm proposals. Strategic reviews announced by companies like Shell and Occidental, which establish net zero carbon emissions (known as Net Zero Goals) by 2050, are examples of this new direction.

International cooperation is essential to ensuring sufficient leverage for low carbon investments, particularly though financial support (such as, for example, the grant of security and performance premiums), so that social and economic difficulties resulting from the energy shift can at least be mitigated.

Environmental, social, and corporate awareness within the new ESG (Environmental, Social and Corporate Governance) paradigm are also directly linked to the energy transition.

Energy transition is a reality that involves great structural transformations, moving from a model that is based in large part on the use of fossil fuels to a matrix that is increasingly directed to generating energy from renewable sources such as natural gas, hydrogen, and wind and solar power).

Driven by the energy transition wave and the new ESG paradigm that has begun to make its mark on the agenda for large investments in infrastructure, financers and investors are performing critical reviews of projects in function of the ESG criteria before making any decision. The fossil fuel industry is at a serious disadvantage from an ESG perspective – and that needs to change.

These days, the major sources of financing are increasingly looking for alignment with ESG principles. They are actively investing in energy

transition, and making reduction of carbon emissions a requirement for strategic financing to companies in energy sector.

In short, the fact that investors now have a greater role in defining energy matrices has enormous importance for the environmental and economic future of Brazil. In parallel, there is no denying the need to keep pace with targets for transformation of the global economy, and to increase or reformulate measures to support the competitiveness of Brazil's energy sector.

Although Brazil's energy matrix is, relatively speaking, one of the planet's less polluting, achieving the goal of decarbonisation demands practical, effective public policies in addition to economic and technological solutions. Along with funding directed to energy efficiency, Brazil has presented a number of incentive programs and initiatives, such as the National Electrical Energy Conservation Program (PROCEL – Programa Nacional de Conservação de Energia Elétrica), the Energy Efficiency Program for Distribution Companies (PEE/ANEEL – Programa de Eficiência Energética das Empresas de Distribuição), and other programs administered by the National Oil, Natural Gas and Biofuels Agency – ANP.

The New Natural Gas Market (Novo Mercado de Gás) also has a contribution to make, although it still faces challenges. Historically, natural gas is the main transition fuel toward a low carbon economy, because it is the fossil fuel that emits a relatively lower quantity of pollutants, organically shifting consumption of other fuels with greater polluting potential and enabling a significant reduction in GHG emissions while the market and society converge toward new sources of renewable energy.

There can be no doubt that the energy transition process is more than necessary – for the future of business and for the future of the planet. The time is one of great opportunity for investment in sustainable businesses and in disruptive technologies, along with new services for production, distribution and supply of energy with the consequent reduction in carbon emissions. Together, they will make the social and economic development of Brazil and other countries cleaner and more sustainable.

NOTES:

[1] According to data made available by UN's Intergovernmental Panel on Climate Change.

[2] Source: https://www.ipcc.ch/report/ar5/wg3/

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