

30 – Repercussions of the Covid-19 Pandemic on the Development of Solar Energy in Brazil

Denise Lucena Cavalcante, Juarez Freitas, Paulo Caliendo

The Covid-19 pandemic broke out in a setting environmentally susceptible to the emergence of epidemics and pandemics associated with, among other factors, poor air quality, pathologies related to chemical pollution, and a growing loss of biodiversity. Amidst the severe environmental crisis and the difficulties created by the sanitary and economic setbacks following the unexpected Covid-19 pandemic, the resumption of the development of renewable energy production has become a major challenge. Both nationally and internationally, a considerable effort is necessary to rebuild economies and health care systems, with less regressive taxation and the concomitant inducement of huge environmentally undeferrable investments, particularly in solar energy, considering the highly favorable Brazilian climate. The discussion on the defrayal of an emergency universal wage also pertains to this setting. Thus, without precluding other structural reforms, the tax system would have to be redesigned to incorporate fair carbon pricing and the exemption of taxes directly or indirectly related to clean energy production. This is an ecosystemically adequate and proportional way of promoting, by way of sustainable taxation, a new and technology-intensive (big data, artificial intelligence, internet of things) model of production, consumption and post-consumption preordered to prevent increasingly likely future pandemics, considering that the current model, with its synchrony of structural flaws, is prone to tragedies of the commons. Based on these premises, we approach the perspectives of renewable energy production centered on solar energy in the setting of the Covid-19 pandemic. Though it is early to evaluate the impact of the pandemic on social and economic life, it is possible to envisage how it may affect environmental goals and policies in the Brazilian energy sector. The study also reviews specific advances in solar energy production in 2020, supported by reports of actual cases and experience.

Biographical note

Denise Lucena Cavalcante: Full Professor of Tax Law at *Universidade Federal do Ceará/UFC*. Post-doctoral degree from *Universidade de Lisboa*. PhD from *Pontifícia Universidade Católica de São Paulo/PUC/SP*. LLM at UFC. Head of the Environmental Taxation Research Group (UFC/Brazil). Government tax Attorney.